

Incorporating
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Galaxy

SCIENCE FICTION

MAGAZINE



Arnold E. Abramson, *Publisher*

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Cover by Gaughan, from **HELIUM**

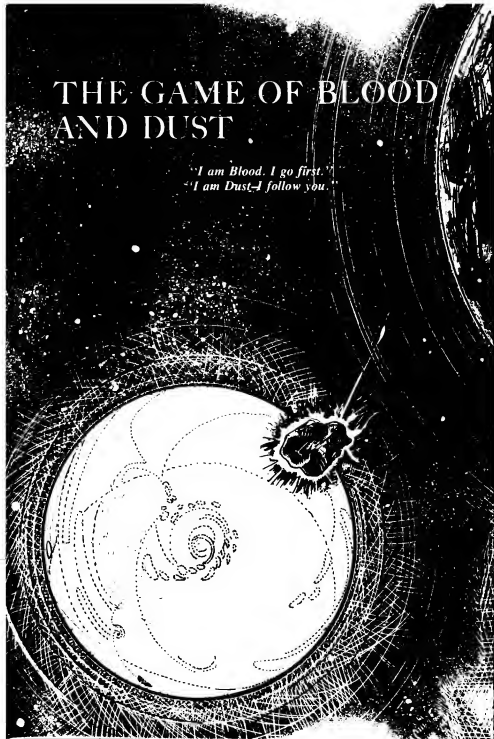
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THE GAME OF BLOOD AND DUST

*"I am Blood. I go first."
"I am Dust—I follow you."*





ROGER ZELAZNY

THEY DRIFTED toward the Earth, took up stations at its Trojan points.

They regarded the world, its two and a half billions of people, their cities, their devices.

After a time, the inhabitant of the forward point spoke:

"I am satisfied."

There was a long pause, then, "It will do," said the other, fetching up some strontium-90.

Their awarenesses met above the metal.

"Go ahead," said the one who had brought it.

The other insulated it from Time, provided antipodal pathways, addressed the inhabitant of the trailing point: "Select."

"That one."

The other released the stasis. Simultaneously, they became aware that the first radioactive decay particle emitted fled by way of the opposing path.

"I acknowledge the loss. Choose."

"I am Dust," said the inhabitant of the forward point. "Three moves apiece."

"And I am Blood," answered

the other. "Three moves. Acknowledged."

"I choose to go first."

"I follow you. Acknowledged."

They removed themselves from the temporal sequence and regarded the history of the world.

Then Dust dropped into the Paleolithic and raised and uncovered metal deposits across the south of Europe.

"Move one completed."

Blood considered for a timeless time then moved to the second century B.C. and induced extensive lesions in the carotids of Marcus Porcius Cato where he stood in the Roman Senate, moments away from another "Carthago delenda est."

"Move one completed."

Dust entered the fourth century A.D. and injected an air bubble into the bloodstream of the sleeping Julius Ambrosius, the Lion of Mithra.

"Move two completed."

Blood moved to eighth century Damascus and did the same to Abou Iskafar, in the room where he carved curling alphabets from small, hard blocks of wood.

"Move two completed."

Dust contemplated the play.

"Subtle move, that."

"Thank you."

"But not good enough, I feel. Observe."

Dust moved to seventeenth century England and, on the morning before the search, removed from his laboratory all traces of the forbid-

den chemical experiments which had cost Isaac Newton his life.

"Move three completed."

"Good move. But I think I've got you."

Blood dropped to early nineteenth century England and disposed of Charles Babbage.

"Move three completed."

Both rested, studying the positions.

"Ready?" said Blood.

"Yes."

They reentered the sequence of temporality at the point they had departed.

It took but an instant. It moved like the cracking of a whip below them. . .

They departed the sequence once more, to study the separate effects of their moves now that the general result was known. They observed:

The south of Europe flourished. Rome was founded and grew in power several centuries sooner than had previously been the case. Greece was conquered before the flame of Athens burned with its greatest intensity. With the death of Cato the Elder the final Punic War was postponed. Carthage also continued to grow, extending her empire far to the east and the south. The death of Julius Ambrosius aborted the Mithraist revival and Christianity became the state religion in Rome. The Carthaginians spread their power throughout the middle east. Mithraism was acknowledged as their state religion.

The clash did not occur until the fifth century. Carthage itself was destroyed, the westward limits of its empire pushed back to Alexandria. Fifty years later, the Pope called for a crusade. These occurred with some regularity for the next century and a quarter, further fragmenting the Carthaginian empire while sapping the enormous bureaucracy which had grown up in Italy. The fighting fell off, ceased, the lines were drawn, an economic depression swept the Mediterranean area. Outlying districts grumbled over taxes and conscription, revolted. The general anarchy which followed the wars of secession settled down into a dark age reminiscent of that in the initial undisturbed sequence. Off in Asia Minor, the printing press was not developed.

"Stalemate till then, anyway," said Blood.

"Yes, but look what Newton did."

"How could you have known?"

"That is the difference between a good player and an inspired player. I saw his potential even when he was fooling around with alchemy. Look what he did for their science, single-handed—everything! Your next move was too late and too weak."

"Yes. I thought I might still kill their computers by destroying the founder of International Difference Machines, Ltd."

Dust chuckled.

"That was indeed ironic. Instead

of an IDM 120, the *Beagle* took along a young naturalist named Darwin."

Blood glanced along to the end of the sequence where the radioactive dust was scattered across a lifeless globe.

"But it was not the science that did it, or the religion."

"Of course not," said Dust. "It is all a matter of emphasis."

"You were lucky. I want a rematch."

"All right. I will even give you your choice: Blood or Dust?"

"I'll stick with Blood."

"Very well. Winner elects to go first. Excuse me."

DUST MOVED to second century Rome and healed the carotid lesions which had produced Cato's cerebral hemorrhage."

"Move one completed."

Blood entered eastern Germany in the sixteenth century and induced identical lesions in the Vatican assassin who had slain Martin Luther.

"Move one completed."

"You are skipping pretty far along."

"It is all a matter of emphasis."

"Truer and truer. Very well. You saved Luther. I will save Babbage. Excuse me."

An instantless instant later Dust had returned.

"Move two completed."

Blood studied the playing area with extreme concentration. Then, "All right."

Blood entered Chevvy's Theater on the evening in 1865 when the disgruntled actor had taken a shot at the President of the United States. Delicately altering the course of the bullet in midair, he made it reach its target.

"Move two completed."

"I believe that you are bluffing," said Dust. "You could not have worked out all the ramifications."

"Wait and see."

Dust regarded the area with intense scrutiny.

"All right, then. You killed a president. I am going to save one—or at least prolong his life somewhat. I want Woodrow Wilson to see that combine of nations founded. Its failure will mean more than if it had never been—and it *will* fail. —Excuse me."

Dust entered the twentieth century and did some repair work within the long-jawed man.

"Move three completed."

"Then I, too, shall save one."

Blood entered the century at a farther point and assured the failure of Leon Nozdrev, the man who had assassinated Nikita Kruschev.

"Move three completed."

"Ready, then?"

"Ready."

They reentered the sequence. The long whip cracked. Radio noises hummed about them. Satellites orbited the world. Highways webbed the continents. Dusty cities held their points of power throughout. Ships clove the seas. Jets slid

through the atmosphere. Grass grew. Birds migrated. Fishes nibbled.

Blood chuckled.

"You have to admit it was very close," said Dust.

"As you were saying, there is a difference between a good player and an inspired player."

"You were lucky, too."

Blood chuckled again.

They regarded the world, its two and a half billions of people, their cities, their devices. . .

After a time, the inhabitant of the forward point spoke:

"Best two out of three?"

"All right. I am Blood. I go first."

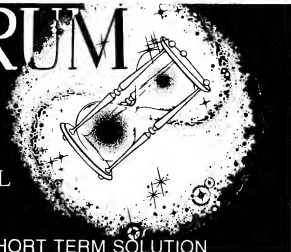
" . . . And I am Dust. I follow you."

★



FORUM

FRED POHL



A SHORT TERM SOLUTION

JOE HALDEMAN wrote to me a couple of months ago and asked me to co-keynote this convention. He said, "I want you to deal with the various problems that face us in the near future—energy sources, overpopulation, eco-disaster and so forth."

And I said I would, but actually I had my fingers crossed. Ten or fifteen years ago I used to lecture a lot on those subjects. I would talk about the black rainfall in Boston, where the smog was so thick the police couldn't arrest the polluters—they couldn't see the tops of the chimneys to know whose stacks were doing it. And I'd talk about the rivers in New England so filthy that you not only can't drink the water—or swim in it—it isn't even safe to drive a motorboat in it; the spray coming up over the coaming can give you a

disease. And it all went over very big with my audiences. They'd have a delicious shudder of fear, and a momentary glow of resolution to clean up our soiled planet—and then they would light their cigarettes, and get into their cars and turn on their air-conditioners and pump exhaust fumes all the way to their air-conditioned, energy-using homes and offices. I remember giving that talk in Cambridge once—the English Cambridge, that is. My host was a marvelous fellow who applauded every word I said and took me to his home for a drink after the lecture. His home was a narrowboat moored in the River Cam, and while we were drinking and talking about the horrors of pollution I felt the need to go to the john, and I did, and while I was in there a thought struck me, and when I came out I opened my

mouth to ask him a question— He anticipated me. "Oh, yes," he said at once, "it goes right into the water, sure enough. But, God, man, what else can I do? It would cost me thirty pounds to put in a sewage trap!"

And anyway that was ten or fifteen years ago, and a lot of time has passed. I'm a science-fiction writer. I like to talk about the future. Pollution, overpopulation, urban crisis, racial strife, protein shortage, fuel shortage, welfare disasters—those are all in the present; and I bet that every one of you in this room has heard so much about them you never want to hear another word on any of these subjects. Right?

Right. Well, I have a surprise for you. I'm going to talk about them anyhow. But not just yet—I have something else I want to say first—and when I do I think I may, believe it or not, have something *new* to say about them.

But first I'm going to talk about science fiction.

Science fiction is a very good way of looking at the future. For one thing, it's cheap. If you want to see what an atomic war is going to do, it is cheaper to write a story about it than it is to start a war. Also it is a sort of diluted reality; people can confront realities in a science-fiction story that they don't want to hear about in real life.

But it is also a good way of matching up possible future events

in such a way that problems become solutions.

Now this is a science-fiction way of looking at things. It is not the real world's way. The real world bumbles along, throwing its empty beer cans out the car window and expecting someone else to pick them up; and when the real world gets a flat because somebody in the car ahead of it has been old-fashioned enough to throw out a beer bottle rather than a can, it feels mightily aggrieved. So it appoints a special commission to study the environmental impact of throwing beer bottles out of cars, hires a large staff of experts out of tax money and devises an automatic highway vacuum cleaner to suck up all the broken glass. The real world takes one problem at a time and looks for the single solution to the problem, which after much study always turns out to be the same thing: money. Or, what is the same thing—but even more damaging in the sense of natural law—the use of problem-creating mechanisms to get rid of the effects of other problems.

I'll give you an example. There is a scarce resource in the world; high-temperature heat. There is plenty of low-temperature heat. That's where the whole universe is going, sooner or later, according to the laws of entropy; and we are moving the process along just as fast as we can.

High-temperature heat is much harder to come by; the principal

way we get it is by sending drillers and pumpers to Saudi Arabia and other unattractive places to suck up huge quantities of oil out of the ground.

That oil is not just stuff that burns. It is basic hydrocarbon, and if you don't burn it you can use it in a lot of jazzy other ways: you can grow food on it, you can turn it into drugs and dyes and plastics. You can even just leave it there and wait until you need basic organic feedstocks even worse than we do now.

We don't do that—we burn it. Once place we burn it is in power plants. We take our high-temperature heat, and we boil water with it. We turn the water into steam, the steam into electricity and we move the electricity out over wires. And then if we've been dumb enough to swallow the stories the public utilities people have been telling us and bought ourselves an all-electric house, we take the electricity and we use it to warm our rooms to seventy-eight degrees, and heat some water for a bath to maybe 100°, and put some in our washing machine at perhaps 140°—all low-temperature heat again, you see. And meanwhile, back at the power plant, all that steam has come out of the turbines and condensed. And they have oceans of water—some at seventy-eight degrees and some at a hundred and ten and some at a hundred and forty—and they have a

hell of a job getting rid of it. They pour it into the rivers and they kill the fish. They pump it into cooling towers, and they create manmade fogs that have been known to close down airports for a week on end.

You see what I'm talking about? It takes no special brains to see that if what you want is just enough heat to warm a room, it is pretty stupid to use a kind of heat that can smelt iron and then dilute it to the room temperature you like—especially as you have the problem of throwing away enormous quantities of room-warming heat on the next block.

Any engineers present will immediately point out that there are difficulties here; and so there are. Difficulties of capital funding, difficulties of design, difficulties of seasonal load. But the difficulties do not add up to enough to spoil the general principle that the problem of getting rid of waste heat can in fact be the solution to the problem of heating a house.

Science fiction is a good way of matching these phenomena together. Not only on the hardware level. I remember a marvelous Fritz Leiber story, *Sanity*; the world was going mad, and the problem was how society could survive when every person in it was insane. Fritz solved it beautifully; he matched the kind of insanity to the job requirement. I don't remember the exact mixes—something like paranoids became policemen, manic-depressives be-

came book reviewers. . . not too much unlike the real world at that. Then there was a Harry Harrison story—I published it, I think in *Galaxy*, a decade or so ago, but I'm sorry to say I don't remember the title. The problem was robots multiplying on their own. A familiar scare theme in science fiction, right? But in Harry's story the robots became raw materials. People trapped the little ones for transistors, stalked and shot big ones for sheetmetal sidings for their homes and so on.

And of course science fiction has proposed gross-scale improvements in the way things are done for a long time. Automatic little cars instead of privately owned 8-cylinder monsters. Telecommunications instead of commuting—we see a little of that now; I think we'll see more. Domed cities. . . You know, I've always suspected Buckminster Fuller of being a secret science-fiction fan. His geodesics look an awful lot like a *Wonder Stories* cover from say 1931. But what Fuller has done, of course, has been to put the numbers into the science-fiction story.

And the numbers, as a matter of fact, are interesting. Consider New York. Fuller wants to build a dome across it two miles wide. To keep the rain out? No, to keep heat where it belongs—out in summer, in winter in. The Manhattan skyline, Fuller points out, is about as perfectly designed a radiator system as you could build: all those

spindly little spikes sticking out into the air, each one of them losing heat from every side and spire and cornice. If you put a dome over it you would save enormous amounts of both air-conditioning and heating. In fact, the radiating skyscrapers pour away *eighty times* as much energy as a dome would. Which would pay for an awful lot of geodesic construction in a short time.

There is no engineering problem here. There is a different kind of problem that keeps us from doming in New York and Washington and Chicago—above all, Chicago—and most of the other major cities in the world: that is, convincing the people who have to foot the bill that it's worth it.

That's a different kind of game, and the name of that particular game is "politics".

AT THIS POINT I arrogate to myself the privilege of any writer who has an audience at his mercy, and I intend to talk a little bit about some of my own work.

There are two in particular. One is a science-fiction story, published in F&SF about a year ago, called *In the Problem Pit*. The other is a non-fiction-book, published by Ballantine for 1972—and, I believe, to be published by somebody else for 1976—called *PRACTICAL POLITICS*. *In the Problem Pit* describes a procedure for identifying what the world's real problems are, and solv-

ing them—hopefully, by using one problem to solve another, as I was talking about a moment ago. **PRACTICAL POLITICS** describes the procedure for making those solutions transit from theory to reality, by means of the existing political institutions—the elections, the political party machinery and so on.

One of the nice things about being a writer is that you can give a sort of a reality to your fantasies by writing them out on paper. An even nicer thing—sometimes quite a frightening thing—is to find that some people somewhere have taken those spelled-out fantasies and transformed them into that other kind of fantasy we call the real world. It happens a lot with science fiction, though we who write it don't always know when it has happened. But in the case of **PRACTICAL POLITICS** I've seen it happen; in places like Georgia and California and Ontario I've heard of people and groups who have brought the book and done what it says and made real, substantive changes in their worlds. A couple of weeks ago I sat on the porch of the mayor of Gpe May, New Jersey, listening to him tell me how he came to be mayor: He got hold of a copy of my book, did what it said—and elected not only himself but a whole city council. All this is great fun and a joy—but also, I must say, a little scary.

But in order to convert theoretical solutions into reality—as in

PRACTICAL POLITICS—first you have to find the solutions. That is where the story **IN THE PROBLEM PIT** comes in.

IN THE PROBLEM PIT tells of a government-funded problem-solving system located in some large caves near the radio observatory at Arecibo, Puerto Rico—no particular reason that it should be there, except that I had just visited Arecibo a few weeks before I wrote the story. (You can reconstruct any writer's autobiography from what he writes, if you know how to interpret it.) It is a long story, and a lot of its wordage is devoted to spelling out how it works: I don't have time to go into it all here. (Anyway, it will be published by and by as part of a collection called **IN THE PROBLEM PIT** and other problem-solving science-fiction stories. I'd rather you read it than listened to me tell you about it. I get better royalties that way.) But **IN THE PROBLEM PIT** isn't just a story.

It is also a proposal for real-life problem-solving. As far as I know no one has actually transformed that fantasy into real-world reality yet, but the World Future Society has offered me a chance to run a pilot-model demonstration right here in Washington at their Second General Assembly next May.

So by the 75 Worldcon, if any of you are interested, maybe I can report on how well it works.

And all of this, you see, is simply one variation or another on the

basic science-fiction game: creating new worlds and seeing how they work out. We sf writers have been doing it for years on paper. We sf readers have been doing it all our lives in our heads. Politicians do it—usually in limited, power-and-plunder-hungry ways, but do it all the same. Futurologists do it, it is their only *raison d'être*, if indeed they can be said to have one at all. And scientists do it.

And now at the end of my talk I would like to tell you about the way one particular scientist has played this game. He is a physicist, and his name is Peter Fong—from Emory University in Atlanta—and I certainly hope he is a science-fiction fan. One of these days I want to meet him, and I would not like to discover that he has done this bright thing without benefit of all the thinking we've been putting into *Galaxy* and *Analog* and *F&SF* for the last umpty-ump years.

FIRST, let's look at the trouble we're in.

Remember last winter's energy crisis? That's powerful trouble. Real trouble—and we're still in it, we just pretend that taking an aspirin has cured the cancer of the brain; but the cancer is still there and deadly.

Remember urban crime? Society's rejects—mostly black or Spanish-speaking, mostly the people, or the children of the people, who had a clear choice between starving on a

plantation somewhere and going on relief in New York or Baltimore and wisely chose relief. Remember mugging, remember drugs, remember the hard-core unemployed in the city's slums?

Remember pollution? the car exhaust that rots these marble buildings in Washington? The sewage that has destroyed a hundred square miles of ocean bottom off New York, befouled San Francisco Bay and turned much of the Mediterranean into a cesspool?

Remember starvation? Hundreds of millions of people in the world living on the borderline, where a drought or a flood can push them over the hunger point into death? Tens of millions of children born into lives that do not give them enough protein while their brains are building, so that all their lives they will be a little less quick, a little less capable than they should have been?

All these problems are right with us right this minute, and they are deadly ones. And no solution is in sight—unless, Peter Fong says, we take all these problems and let them solve each other.

How do we do that?

Corn and booze.

Now alcohol is a well-known problem-solver. Some of my best friends have solved their problems that way, and keep right on doing it, until they solve themselves into delirium tremens and death. That isn't quite what Fong has in mind.

Don't drink the alcohol, he says. Put it in the tank of your car. If you replace 20% of the gas in your tank with alcohol you don't have to do a thing to the engine—in fact, it works better than it now does on gasoline—you cut down the polluting emissions by 20% right then, instantly; you reduce the need for oil imports, help the balance of payment, take the Arab sheiks down a peg and strike a blow for the independence of Israel. Name it. You do it, and that's how.

Ah, you say, fine. But where do you get the alcohol?

Why, you grow a lot of corn. You don't need all the corn for fermentation into alcohol, only the starch. You've got 30% left over in the form of protein and 3% in the form of oil. You can feed these to hungry people if you like—they are extremely nutritious. Or you can feed them to livestock, cutting the cost of raising steers, putting more steaks in your supermarket and ending—did you forget this one?—the meat shortage too. You also have the corn stalks left over, and you use them to fuel the boilers that distills the fermented starch into pure alky.

Who grows the corn? Ah, says Fong, you have all those urban hardcore unemployed. Give them a 40-acre farm apiece, a million and a half 40-acre farms. Better still, don't give them to them. *Sell* them. All this stuff is cottage industry, it can be done just as well in indi-

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vidual 40-acre bits as in one mammoth Federal Booze Project, and the earnings for each farm after all expenses are paid should come to between ten and twelve thousand dollars per family. Not a fortune. But a hell of a lot better than welfare, not to mention the advantages of running your own vegetable patch and chicken yard if you like. So on a reasonable mortgage your formerly unemployed can pay off his farm free and clear, feed his family, educate his kids and, for the first time in his life, most likely, find himself in a world where his own life has some point and purpose.

Where do you get the farms? You just reach out and pick them

up. The United States is full of played-out farmland, or soil that doesn't want to grow a crop. Bad land, but land. All it needs is something to make the bad land good, and we have that—every one of us produces about eight ounces of it every day, and there are a lot of us producing—and we flush it away and ruin our waterways with it, and yet it is the finest and best stuff you can get to make things grow. The Japanese and Chinese have used human excrement to grow crops for hundreds of years. We westerners are much too fastidious. Indeed, there is some reason for daintiness here; there is a risk of disease, a problem of sterilization. But the basic problem is esthetic. We don't like to put into our mouths something we know to be containing molecules that recently came out of some other part of another person's anatomy—it seems to be all right if it came out of a horse or a cow, rather than a person, which is rather strange—but strange or not the prejudice is there. Only it disappears if you use the excrement to fertilize something you're going to put in the tank of your car.

And so you've solved the lot—end sewage pollution, cut down car exhaust damage, slash the relief rolls, radically diminish the preconditions for slums and urban crime, help the balance of payments, decrease the velocity of the energy crunch, make steaks cheaper and more available . . . it kills every

bird in sight, claims Fong with modest self-satisfaction, even up to economic growth and school bus-ing.

And by gosh, when you look at it, it *does*.

NOW, WHAT'S WRONG with this proposal?

Oh, a few things. Several scholars have complained that its long-term effects diminish; it is only a temporary solution, they say. And that's true enough. In the long run we have to find quite different ways to live. But the trouble with the long run, as John Maynard Keynes told Franklin Roosevelt thirty or forty years ago, is that in the long run we are all dead.

It also does not solve every problem for everyone; there are only a million and a half farms proposed, and there are more than a million and a half people in trouble.

But what a beginning! And the beauty of it is that each problem solves the other, like cobras supporting themselves by eating each others' tails, until the ring is complete and the problems all disappear.

SO THERE WE ARE—and well enough, too; I'm just about out of time. I want to steal just a minute or two more to close on another note—a rather different one, and quite a personal one.

I suppose a lot of you have heard me speak before, perhaps at the Los

Angeles Worldcon a couple of years ago; and perhaps if you do you remember what is an article of faith with me. That you and I, and Harry Stubbs and Harlan Ellison and all of us here are in some way brothers. We are a family. We are united in a way that I can only faintly perceive, but which seems to me to be so strong a way that although we differ terribly from each other on questions of religion and politics and life style—and battle among ourselves on matters of dominance and resentment—yet we always come back to each other, to share what we have done and learned; because who else is there to talk to?

Well, I don't quite mean that. There are other people to talk to. More than three billion of them, on one level or another. But there is something about us, about all of us, in this room and in all the other places in the world where science-fiction people get together, that makes us important to each other, for the perceptions and the understandings that we can best share. We are droogs, sometimes, joining together to stomp the rest of the world. We are water brothers, sometimes, sharing the precious resource of imagination and creation.

We may, of course, from time to time hate each others' guts. You out there in the seventh row, fourth seat—you may not like me very much, and maybe I don't especially care for you. But in some way you are a very important part of my

life . . . as I think I am, of course, of yours.

So I talk, on subjects like these, many times in many places to all kinds of audiences. And I say pretty much the same things. The details change as the world changes, but the theme is all about the same.

But when I talk here, to you—my friends, my water-brothers, my droogs—I want to talk in a special way. I don't want just to argue you into my way of thinking. Or to inform you, or to educate you, or even to entertain you. What I want is to share with you—my family—that very basic article of faith in my head which says there are no problems, there are no hopeless disasters, there are no inevitable dooms; there are only games we play with ourselves, pollution games and crime games—traps we put ourselves into, shortage traps and inadequacy traps—and we can stop playing the games, we can free ourselves from the traps, *any time*.

All we have to do is summon up the resolution to do it, and all it needs for that to happen is for some people somewhere to make up their minds to start it. To start thinking in terms of what we want, rather than what we fear. To start planning not for what makes us more rich, but for what makes us more free.

It can be done—by somebody. And—droogs, siblings, water-brothers, friends—if we don't do it, who the hell will?

★

What is most precious to a people
will vary from Age to Age. In one
it may be Gold, in another, Petroleum;
and in yet another it may be—

HELIUM

ARSEN DARNAY

Langdon



I THE BASTIONS OF THE WHORE

Four kilometers from Ricardo, the horsemen stopped for a rest, and while their ponies stretched down to graze, the men stared up at the Acropolis. They were Ecofreaks and far from home, dressed in beaded leather suits and wearing floppy black hats. Their long hair was braided, their faces tanned, but these were not ordinary herdsmen, as evidenced by the ornate ceremonial daggers and the gilded red Crestmore bibles that hung from their belts.

Mutagrass rolled in the breeze behind them. It thinned out ahead as steppe gave way to no man's land—the Desolation, in tribal parlance—a dusty, boulder-strewn ring around the city, made by the

deadly emanations of gravitron.

Mycal Bono, leader of the group, took off his hat and wiped his forehead with the back of his hand. He closed and opened his eyes to ease the wind sting. Then he threw his head back to see Ricardo's five looming towers. Today the tips were lost in moving clouds. He couldn't see the towers in their entirety. Drilla-glass mirrored the setting sun. A reticulation of dark plastosteel held the glass in place and supported the structures. At this distance, the frame resembled a screen of hexagons.

Bono thought: *Poisonous silver stems. Rooted in the Desolation. Full of humanity.*

He shook his head. He hadn't seen a structure in years, and the prospect of Ricardo, especially at close proximity, was awesome.

Most structures, including those of Ricardo, were at least three thousand meters from root to crown, an unbelievable height. The sway of the towers induced dizziness. The observer felt that the structures leaned threateningly down toward him.

Bono turned away, plagued by a childhood memory. It had come on him early in the morning while boarding the large helicopters near Wellhead for the long flight north. The feeling had persisted. The forty-kilometer ride from the Staging Station hadn't shaken his mood.

As a small boy his father had taken him to Husten, a mono-tower city. Panic had gripped him a short way into the Desolation. The gravitron vibrations had tightened about his body like so many invisible claws, and he had screamed and fought until his father had sent him back with a mutant slave. At the time his relatives had teased him about that, calling him a true tribesman—one who couldn't stand the grav.

Men rested all around him. Some had dismounted. Some sat and stared at Ricardo's visible parts below the clouds. Talk buzzed.

To his left the heavy-set Sonder, physicist of the group, explained the mysteries of gravitron to a youngster they'd picked up at the Staging Station to take the horses back.

"Drums," Sonder was saying. "Drums in the caves below the towers. They generate the stuff. And our Helium cools the machines. No Helium, Freddy, and poof! Down she goes."

Bono imagined Ricardo falling.

He saw the framework buckle and twist. He saw the towers sag, split apart, and spill millions of people into the air—the hard outer crust and the soft, organic, mushy innards. In mind's eye he saw people, rubble, and machinery fall down in a rush. Then he imagined Desolation dust rising like a veil to cover the scene.

It was a vision of the Great Change—the end of the structures. Like many other young Activists, Bono had heard the Older Tack hold forth about it with a Crestmore bible open in his hand. "The structures must be destroyed," Old Tack had thundered with a balled, veined fist shaking the air. "We can't let the Abomination take over earth again!" And with that OT had always hit the table with a crash. Old Tack had had bushy grey eyebrows, a florid face, and eyes that had flashed. You couldn't help remembering such a man. He left a deep impression, especially on the young.

Old Tack was dead. Like the legendary Moses of the Bibliobooks, he had died before his dream had been fulfilled. Unlike the legendary Moses, he hadn't even glimpsed the promised land.

Bono's situation was not without irony. The least enthusiastic of the younger Activists stood before Ricardo with a mandate to negotiate the last and decisive Helium deal. Bono's assignment amounted to nothing less than the destruction of Union's thirty-nine structures. Would Mycal Bono, the silent doubter, achieve OT's dream?

Bono fell into a brooding contemplation of his role. He felt ex-

tremely small and puny—a mote of dust in the vast sweep of history that had created the Union of Structures. A thousand years seemed a very long time against his thirty.

A thousand years, yes, give or take a handful. The last of the so-called limited nuclear wars had been followed by a period of interregnum. The last one had been. . . which? LNW XII? LNW XIII? Bono could never remember. At the Academy of Action, he'd had to memorize the circumstances surrounding each war, but they all ran into each other in his mind. Well, it didn't matter a great deal. What mattered were the structures.

Bono tried to imagine their genesis: how the ancient city dwellers had invented gravitron with whose aid vertical cities could be flung into the sky. The ancients had gone straight from a mole-like existence in underground bunkers into the heights. In one gigantic leap, as it were. In his mind Bono pictured structures rising out of the rubble, yes, like poisonous stems. Structure-man had found an answer to the scarcity of useable land. Remarkable as it seemed, nevertheless it was true—nearly 100 million people in structures occupied a mere eight hundred square kilometers of ground, all of it along the coasts. Their fusion reactors ran on hydrogen ions that were plentiful in the sea.

What a shock it must have been to the pious tribal elders, it occurred to him. If the ancient tribesmen had been anything like the Older Tack, they must have fallen into paroxysms of rage when the first reports of structures came filtering

back to Hinterland. The Technology Beast has risen again! No sooner dead than resurrected. Foul Phoenix. And the old hatred had burst into flame again.

Bono knew himself a product of that hatred. A thousand years of hate had caused him to sit here before Ricardo on a pony with a secret locked in his brain. The tribes had waited a thousand years for this opportunity. Now they only needed a small assist, a very small favor from Union. If only Union could be duped! If Union could be persuaded to mix up the poison it would have to swallow—then Technology would be finished.

Or would it? Bono experienced a stir of doubt. Union might be destroyed. But then, for all they knew, Technology might rise up elsewhere—in Europe, in Asia, in Australia. Since LNW XII or XIII, whichever it was, contact with those continents had been lost—more by choice than necessity. Structure-men had the means to travel. But exploration was not their long suit. Life in structures seemed to be an end in itself—or it destroyed curiosity. Maybe. The men of Union lived too far from the surface of the earth. They saw it through windows. Always. The horizon did not entice them. Bono guessed that life on other continents must be like life in Hinterland: simple and savage. Structure-man wanted no part of that. If it weren't for Helium. . . .

Helium.

The noble gas was essential for the gravitron reaction. And the pipeline through which it flowed was like an umbilical cord that

bound structure dwellers to the earth. Against their will, in a sense. Bono suspected that Union would pay no attention to the tribes at all if it weren't for those rich Texahoma wells—or if they could get enough Helium out of the air, which they couldn't. But they *did* need Helium. And therefore their missiles ringed North America, aimed inland, a perpetual threat.

Bono shook his head. It was all too vast, too much, too improbable. His task seemed overwhelming. He had no confidence in this venture, yet here he was. It seemed wrong, somehow.

Bono sighed and turned to his right.

Sunk deep into his saddle, tire-some old Franco Dart had reached over and now pulled Bono's sleeve. He pointed to a hovering airship some distance from the road. Union airships were held aloft by gravitron and resembled large glistening rods. One blunt, rounded end of the ship faced the horsemen. The ship had picked them up a kilometer or two outside the Staging Station and had shadowed their approach ever since.

Dart said: "They're filming, Mycal. They film and film. I'll bet you Reston Proctor is watching us. I'll bet that he sees us talking."

On Bono's left Sonder said: "No, Freddy, you don't get it. The vibes make the *steel* light. Light as feathers. It's the plastosteel, not the drilla-glass."

Bono didn't answer Dart. He still mused about his chances of success, that worrisome childhood memory in the background.

Dart peered at Bono with a disapproving look. The chief's hooked

nose and forked black beard gave Bono an aggressive air, but Dart saw a dreamy haze in Bono's eyes, a telltale trembling around his lips. Bono had a good face, but he lacked that . . . something; that special quality, leadership. . . .

With a measure of pride Dart recalled how he had opposed Bono's appointment as chief of mission. Dart had protested, oh, yes. He had the courage to oppose, whatever his age. His was a voice of wisdom among the brash young men around Jonny Tack.

"Go with him," Tack had said. "Keep your eyes on him."

But Tack had sent him as a 'senior advisor,' that is to say without authority—which made Dart mourn the passing of the Older Tack. Now there was a man!

"Mycal," Dart called again. "I said, they're filming us!"

"What? Oh, yes, You've said that before. The Media."

"It's more serious than that. They use the films for intelligence. They study our faces. They build profiles on us. Psychometry."

Bono shrugged. "We can't stop them."

"No, not *that*! But you must be aware of it."

"I am aware. Believe me, Franco, I'm aware."

A group in the rear laughed uproariously at something. The noise startled a flock of black carries. They rose from the long mutagrass, flew low over the ground, then dropped out of sight again.

Dart wondered if the men were laughing at him. He threw them a suspicious look.

"Look, Freddy, imagine a

molecule like this, see? Fifteen in a row? The gavitron vibes come in here, see? And they make these little balls stretch. Got it?"

Bono glanced at Freddy and saw that he still hadn't got it. Then he turned to Dart, aware that the old man was unhappy. The younger men all humored Dart, the last surviving member of the old core of Activists.

"What do you think, Franco?" Bono gestured toward Ricardo with his hat. "The bastions of the whore—will they fall this time?"

"All thirty-nine of them, on all the coasts. It is written." Dart slapped the red Crestmore bible hung on a chain from his belt. "'Her bastions shall crumble, and from the dust shall rise a new time.'"

"It is written," Bono murmured. He stared up. "Collapse they will," he said without conviction. "Sooner or later. The question is when. This time? Or some other time?"

Dart answered: "This is *your* chance, Mycal. It's a good chance. Everything aids you: Jonny's courage, Unsler's senility. You're the man if you want to be. You're the chief of mission."

Bono's close friends thought him quiet, sensitive, curious, and somewhat retiring. Those who knew him less well considered him a sullen, moody man. But unlike other sullen, moody men, he was not forever in the lotus posture praying for deliverance from Technology. He was no zealot. But only Bono knew the degree of his own ambivalence about the Activist cause.

Now he felt the excruciating pain of uncertainty. The gigantic pentastar up ahead attracted and re-

pelled him in turn. Inwardly he scoffed at the crude negotiating strategy Jonny Tack had dictated. The tribes had waited a thousand years for this moment. Did they have to implement the plan within a month? Couldn't they get micro-welders instead, patiently, piece by piece? No, apparently not. Tack had no patience with long-range strategies. Now! Today! But Jonny's hurry, more than anything else, destroyed Bono's confidence. He despaired of success. Yet, at the same time, he had accepted the job. Why? *Pride*, he told himself. *I can't just disregard the prophesies. If this is the time, if the scheme succeeds, my name will live in history. And yet. . . .*

"No, no, the other way about," Sonder said. "The vibes enter the atom like this. In a spiral. They loosen the electronic grip. Yes. . . like that."

Bono said to Dart: "All right, Franco. We'll see. We might as well go in there and see what fate holds." He swivelled in his saddle and waved an arm. "Mount up, men," he called. "In the name of Ecology, let's go and do it."

In a moment the horsemen plunged down the side of the rise and coaxed their struggling, reluctant ponies into the vibration-filled Desolation.

THE FIVE-PERCENTER

Rivera French left the communications room of the Bureau of Tribal Affairs and, accompanied by a crew of experts, he travelled by jump tube to the West Tower recep-

tion hall where, traditionally, BTA received Hinterland delegations come to negotiate.

On the way he turned to a member of his staff. "Have you called the Ambassador?"

The staff man nodded.

"And?"

The man said: "They thanked us for the information but said that no one would be present at the reception."

"Did you ask them why? Have they been told to stay away, or is it Andros Barney playing games?"

The man said: "They acted very reserved. I couldn't get much out of them."

"Did you talk to the ambassador personally?"

"Yes. I got the feeling Barney resented my calling. He is used to dealing with you."

French said: "Well, there's a nice start."

They arrived in the reception hall and found a crowd pressed against gold roping hung in slack curves from silver posts. Media crews stood in readiness with cameras and lights near the double-winged portal. Servants polished wine glasses beside a table in the back. Huge green banners with the white Ecology symbol in the center hung from the walls and trembled in the flow of ventilation air.

The BTA experts arranged themselves in the center—a clump of yellow robes. French walked some steps ahead of them and took up a stance beneath a chandelier, a middle-sized, sturdy man in a purple robe. He had long blond hair, carelessly tossed. His face, tanned an orange-brown in the rays of arti-

sun, revealed his tension in a movement of muscles under the skin of his cheeks. He pulled down on his robe so that it wouldn't bunch above the belt and waited.

Seven weeks ago word had come through intelligence channels that the Accommodationist faction of the Ecofreak tribe had been ousted by the Activist minority. BTA had worked five years to prepare for this Helium round. That news had destroyed five years of work. Union marched into this battle blind. No Activist had held power in Ecofreak since the Helium War of '11. Almost nothing was known about Activist personalities, and French was both curious and anxious.

He blamed himself for the situation. His intelligence apparatus had failed to predict the political shift. The chief Negotiator had visibly cooled toward French as a consequence—and no wonder. Proctor expected much from this negotiating round—and so did French. Proctor had formed a revolutionary group immediately after the series of executions that had marked the Dynastic Proclamation four years back. Only recently had Proctor drawn French into the plot. French had joined eagerly, flattered by the distinction. Yet now, when the time drew near, he'd failed Proctor. The Secret Agenda depended on Ecofreak participation.

French stood and waited, growing impatient.

Impatience was one of his failings.

Miri always scolded him for it. She called him a man who tried to leapfrog over himself. "You're a trinity of impatience," she said.

"Impatient in love—you proposed to me an hour after we met. Impatient in eating—you bolt your food as if you *wanted* an ulcer. Impatient to rise—what do you want to be? Unifier?"

French always answered: "I'd do better than Bernie Unsler, girl."

Miri disapproved of his ambition. She came from a high-level family and couldn't understand his slum-kid drive for the bigger world. Branco was way in the bottom. He wanted up, up. Dammit, he wanted to rise, and nothing wrong with that! The Top was ruled by stupid, evil men. You had to rise to right the wrongs.

French had his eyes on the floor of the hall. The emblem of the Unsler family was reproduced on the white tiles—a red flower complete with cup, stem, and a single leaf. Ten years ago, when French had entered service at age twenty, this floor had been covered by Ricardo's ancient symbol, the spiral, depicting the flow of gravitron vibrations. Unsler had gathered the power, both symbolical and real, but now his hands grew slack on the reins and his son waxed strong. French wished Proctor luck with the Secret Agenda. Proctor would be a better ruler than Unsler.

An attendant by the double-winged door, whose eyes had been hefted to a narrow observation slit, now turned and called back: "They're here."

The murmuring crowd fell silent. The doors flew open and the Eco-freaks came into Ricardo in a wedge-shaped formation with Bono at their head—it had to be Bono, as per dispatch. Hoofs clattered on

Ballantine Books



So you thought last month's enormous science-fiction promotion was something? Well, you haven't seen anything yet. Those nine big, beautiful titles we launched on the world are already creating quite a stir in the industry... and several of them are beginning to sell out their first printings. We are even making "back-to-press" noises to keep the racks filled.

But that was only the beginning... the beginning of the biggest and best sf/fantasy promotion ever. We'll be publishing 3 super titles every month—new books and reissues of great old classics that have been out of stock for too long.

And the second installment of *Science Fiction '75* leads off this month with Poul Anderson's spirited adventure fantasy *A Midsummer Tempest*... best thing we've read by Poul in many and many a moon. We came upon this novel in its hardcover incarnation just about a year ago and took it along on our trip to last year's Minneapolis science-fiction convention. High in the sky—somewhere between New York and Minnesota—Anderson's magic worked its charms, and we could not wait to get home and buy the book for our list.

Imagine a world in which every word written by Shakespeare was literally true... a world in which Prince Rupert of the Rhine could fight for Charles I of England and escape the Puritans by hijacking a railroad locomotive—on the right track, but 200 years before its time!

"... Sword, Sorcery, Religion, Literature and Love—plus a rattling good adventure yarn," said one reviewer: "... a virtuoso performance," said another—and we agree with both.

Now here's a name to conjure with—Darrell Sweet... (a flourish of

trumpets is heard in the mind's ear!). He painted the cover for the Poul Anderson book, and we liked it so much we thought to put Darrell under contract before the competition decided to compete for his work. We think he's the find-of-the-year...and our "think" is confirmed by *ooohs* and *aaahs* whenever proofs for one of his finished covers arrives in the office. He's already completed seven or eight paintings, and he's promised to us for dozens more. Watch for them! And don't forget the name...remember, you heard it here first!

We do gush on about our artists and our covers...but if the package isn't right the book won't sell...or at least not as well as it should. So, no wonder artists and art directors (hall Ian Summers, the noblest art director of them all!) are VIP's around here.

• • •

Back on the list after an absence of far too long is David Gerrold's now-famous novel *When Harlie Was One*. HARLIE, as you may recall, was the world's first Human Analogue Robot, Life Input Equivalents. In other words HARLIE was a computer...a computer who thought he was human. And that's where the trouble began...and then it got worse. Like the time HARLIE invented—get this!—God! And then there was the time... But you'll have to read the book (or reread the book) to find out. David tells us there will be a sequel coming...something about *When Harlie Was Two*!

David, as you may remember, has written several books about *Star Trek* for us, each of which has had several printings. He's also the author of perhaps the most famous *Star Trek* episodes—all about some furry creatures that multiply endlessly—or the mutated variety that grow and grow and GROW. And that brings us to the next book on the list *Star Trek Log Four*, adaptations of everyone's favorite television series by our own Alan Dean Foster! One of the episodes in the new books is—you guessed it—"More Tribbles, More Troubles."

• • •

the tiles. The ponies were small, hairy mutants and had frightened eyes. The tribesmen blinked in the floodlights of Media.

The noble tribe of Ecofreak. They were the largest and most powerful among the peoples of Hinterland, French reflected. They always came on horseback—matter of principle. At home they used technology with relish. But when they came before the Enemy, they pretended to be purer than the pure.

The delegation stopped before him, and French bowed low beneath the chandelier. The smell of horses brought to mind memories of clandestine Hinterland missions.

He watched Bono swing out of the saddle and observed the supple grace of the man, the fierce expression on the face. Bono moved like a herdsman—probably owned whole countries of silvery land speckled with cattle, white Harvey hare, and the black prairie birds tribesmen called 'carry' after carrion. Bono's spurs rang on the tiles as he approached. The Crestmore bible on his belt swung on a tarnished silver chain.

As they shook hands, French observed the face closely. Bono's narrowed eyes were cool, unfriendly. Bushy brows, hooked nose, a sharply sculptured, forked black beard. Aggression. Yet French also sensed a disturbing shyness in the man. *Shy men are poor negotiators*, it went though his mind.

They exchanged traditional greetings under blazing Media lights.

"Welcome to Ricardo, Chief Bono, the Pearl of Union. May your stay be profitable."

Bono answered: "We come

under duress, Mr. French, and protest the threat of your missiles."

And French: "We threaten no one but ask only for that which we need to live."

French led Bono to the waiting BTA experts and introduced them one by one. Then Bono did the same in turn, surreptitiously assessing the young Deputy Assistant. The innocent charm of the man, those curls and locks of blond hair, that cleft in the chin, that small, pulpy nose, that dimple in the cheek, his whole look of careless, twinkling bravado disguised a tough and able man. Bono recalled French's history, had read it over again on the flight north.

French was a vegetable smuggler from a notorious slum-level in East Tower who, by dint of native abilities and a fortunate marriage to a high-level girl (he'd met her in Branco, which was a kind of artist's haunt, among other things), had been lifted up and educated. In the service of the Bureau of Tribal Affairs, he used his pugnacious skills against the tribes. Some years back he'd earned fame among the tribes as a reckless agent. They'd called him 'starface' in Hinterland after a small scar on his forehead that he covered up with make-up when in the field. Now French was chief of intelligence, although he carried the title of DA for Public Affairs.

A shrill neigh made them look up. The ponies had begun to panic in the gravitron vibrations. They reared, screamed, and kicked in all directions. Tribesmen rushed to aid a youngster who fought to control the animals. The crowd laughed at the turbulence. It took a moment to

unload the pack animals. Then a youngster leaped into the saddle, gave Bono the raised-fist salute of the tribes, and with a cry drove the horses toward the entrance. They disappeared in a cloud of dust.

French met the last of the tribesmen and recognized one of them at last—not by appearance but by name. Franco Dart was a small, old, wrinkled little man with suspicious eyes. French knew him as one of Old Tack's not-so-brilliant associates. He'd been a member of the Ecofreak embassy many years back, a first or second secretary, one of the few Activists with a profile in BTA's computers.

French turned to Bono. "Shall we toast your safe arrival?"

Bono gave a stiff little bow. "At your service."

They walked to the table at the back. Their followers came behind them like a comet's tail, while the crowd gaped and savored the traces of rank horse smell left behind by the departed herd.

Against the back of the hall hung circular emblems of all Hinterland tribes—Maoling, Peacefreak, Narodnik, Twin River Compromise, Bluegrass Territory, Planetfriends, Gulfrats, Ecofreak, and others. French pointed to them, but Bono couldn't see them properly.

Moments before he had begun to see double. Now murmurs in his stomach signalled the onset of nausea. The clammy feel of cold sweat spread from his armpits and neck over his body. His hands trembled as he took the glass of bubbly wine and his tongue slurred the words as he responded to French's toast.

Waiters brought sandwiches on trays, but Bono shook his head.

French turned to Bono. "I don't see anyone from the Ecofreak embassy. We notified them of your arrival. Did *you* tell them to stay away?"

Bono nodded. "Barney is not of our party. We don't expect him to play a role in these negotiations."

"Why hasn't he been replaced?"

"He shall be," Bono replied. "In due time."

"I must say the sudden change in leadership caught all of us by surprise here."

Bono didn't answer. He stared into his half-empty glass. He blinked in the characteristic manner of a man with gravitron bends, surprising French.

"Tell me, Chief Bono. Is this your first time in a structure?"

The tribesman nodded.

"In that case you've still got it in front of you."

"The Adjustment?"

French nodded. "But it isn't all that bad. It takes less than a week. By the time of the opening ball, you'll be completely attuned."

Bono said: "I suppose we couldn't skip the opening ball?"

French smiled. "Impossible, Chief. Tradition is tradition. Receptions, balls, rituals. How can we hide a man of your distinction from the curious eyes of the ladies? Some of your countrymen are very gallant."

Bono heard French but could not concentrate on the conversation. He felt an unreasoning rage and longed to give it expression.

"I'm a strict constructionist," he said. "I shun frivolity."

Bono's feelings about the subject were more complex than that, but in the eyes of the blond DA he preferred to appear to be a conventional Activist.

French answered: "A good rule, by and large. Let me assure you that Union respects your wishes. But the opening ball is absolutely unavoidable. The tradition goes way back. . . ."

He saw an expression of pain flash across Bono's features.

"Are you starting to feel it already?"

Bono's rage grew and grew. Pressure choked him. The feeling was entirely physical. His mind and spirit were benevolently inclined toward French, but something made him want to strike out.

"H-how can you stand it," he brought forth.

"Th-this. . . v-vibration." His hand described a circle. Wine spilled. Servants rushed in to wipe up the mess. "Are you p-people mad? When will you l-leave your er-rant ways!"

French looked at him indulgently. "Where would you have us go? Where should we put our millions? The tribes have all the desirable land. Short of atomics, how could we prevail against you? We like the High Culture—we also like compression. We don't force you to live here. It's to your advantage to maintain Union. You've got no use for Helium. . . . And neither of us wants the alternative."

He noted a pulse of pain in Bono's face. The man's elbows jerked outward.

French added: "You'll get used to it. In five days you'll be ad-

justed. You won't even feel the vibes."

A five-percenter, French told himself. Or else he couldn't feel it yet.

Bono was preoccupied. His lips trembled as he tried to form words.

"I . . . don't u-nderstand. . . it. Y-your life span. . . is fifty-five at best. You deliv-delib-berately. . . deliberately. . ."

"Yes?" French prompted.

" . . . k-killing yourselves," Bono completed.

Then he took himself in control. His eyes gained focus. His cheeks stiffened under the beard. Bono took a step toward the table. His feet seemed heavy. He placed his glass on the white table cloth with a studied gesture.

Turning to French, he spoke very slowly. "With your permission, Mr. French, we'll now take our leave. We've had a long flight and an even longer ride."

French bowed. "Of course, Chief. As you wish. Jump tubes are waiting outside. Until you and your associates have learned to operate them, one of my men will guide you by remote control."

THE CHIEF NEGOTIATOR

The Bureau of Tribal Affairs occupied nearly one quarter of Level 125 or Old Top, so called because it had been the summit of Central Tower until the end of the seventh century when Helium-cooling had dramatically improved grav-drum performance and two hundred new levels, spacious in the extreme, each with several storeys, had been added to the tower.

Nevertheless, there clung to Old Top a certain hoary magnificence, a memory of wealth and of rooftop gardens open to the public, from whence structure folk had gazed out over the Atlantic or Hinterland through pressure-sealed glass.

BTA's current quarters had been the Lord Mayor's domain, and the Lord Mayor's former office now belonged to Reston Proctor. Wood panelling nearly black with age formed three walls of the spacious room. Slender white columns a meter from the wall held up a vaulted ceiling from which the iridescent colors of an exquisite micro-mosaic reflected light. The outer side of the office, beyond the columns, was an outjutting terrace shut off by floor-to-ceiling drilla-glass. From that terrace Proctor could look across at West Tower or down at the intertower beltway that linked Center to West like a slack hose of translucent silver filled with motion at all times of day and night.

Proctor sat behind his desk and, over its cluttered surface, he watched the screen of a visiset that had been rolled in over the heavy red carpet leaving a trail on the soft fibers. His face was pensive, eyes impassive. He wore the shimmering blue robe of a Big, the sleeves rolled up to the elbows. Proctor was a short, heavy man whose powerful neck, barrel-like torso, massive round head, heavy jowls, and an abnormally large and outjutting chin suggested the legendary rhinoceros.

He sat surrounded by mementoes of his rise to power. Models of missiles on his desk marked his years in Defense. On the walls hung certificates of appointment to

ever higher jobs in various parts of the bureaucracy—Defense, Commerce, Public Order, Media, Health. Between these framed and ornamented pieces of scriptoplast under glass, and on little tables strewn about the room between armchairs and couches, were signed photographs of virtually every member of the Unsler clan, including an inordinately large holographic representation of Unsler himself. It hung by itself on a wall behind Proctor's desk. On a golden plaque set into the gilded frame of the picture was an inscription reproduced from the Unifier's hand: "To the best damn administrator who has ever served our noble cause, Bernie."

In the visiscreen tribesmen stepped into upright jump tubes parked in rows outside the reception hall. Proctor watched them.

The flat remorite on his desk lit up; a slip of scripto extruded from its slit. Proctor reached to get it. His secretary had written on it: 'Blottingham insists that you brief him (telcall is enough) on your assessment of the delegation.'

Proctor crumpled the note in a meaty fist. He held it for a second thinking of pear-shaped Blottingham whose power increased as Unsler's declined. Then he threw the slip into the dusto and wrote a note for Mrs. Sedlig. It said: 'Call Blottingham and tell him to jump down a shaft. Tell him verbatim.' Below he penned a large, bold P. He stuck the slip into the remorite, leaned back in his throne-like chair, crossed his thick arms across his chest, and turned his attention back to the screen.

But his concentration wandered, his mind exercised by Blottingham's peremptory message.

Well, he thought, so far as I'm concerned, Unsler can do what he bloody well pleases.

Proctor felt strong for the moment. He wouldn't jump every time Unsler's pear-shaped staff-chief whistled. The Helium round was underway—a poor time to change the Chief Negotiator.

A few more weeks, he thought. A few more weeks. . . .

Proctor shifted position. His blunt fingers drummed on the desk as he watched the tribesmen. Terrified. They were terrified. They gripped the waist-high tube rails as the jump tubes rose above the movebelts. They looked manageable enough, these youngish men. Proctor had hopes that they'd deliver the brief Interdiction he needed to carry out the plan. Of course, one never knew. . . .

The deep, melodious chime of his tel sounded. *French!*

He reached for the small-screened tel to his right, punched a button. French came on. Behind him, through the telbooth glass, Proctor saw two BTA staffers talking.

"Just a minute," Proctor rumbled. He reached for the black cube of his intercept. A spiderweb of wires trembled on top of the device. He touched its sides, and the cube turned red.

"Have you got your intercept on?" he asked.

French nodded.

"Very well," Proctor said, "tell me what I already know."

French chuckled and gave his report while Proctor wondered how

these men would react to his proposal. After a while he broke in.

"How does Bono strike you?"

"Fanatical, uncomplicated, probably rigid. . . But it's too early to tell, Res. You saw his behavior. He's a five-percenter, and I'd wager he'll have a tough Adjustment. Grav-bends make people act strangely."

Proctor said: "I'm watching him now. He's jerky, all right. His eyes are erratic."

"Another thing, Res. He calls himself a strict constructionist, claims to dislike frivolity—by which I guess he means the social side of things."

Proctor, eyes on the screen, nodded and turned to French. "Our women are the devil's brood? Pol-lute the tribal blood?"

French smiled. "Now, Res, I don't think I'd go as far as that. That'd be the extreme form of the disease."

Proctor recalled the last Ecofreak delegation, said: "It would be refreshing—after the debaucheries of '51."

French laughed. "I wouldn't expect high moral tone, if I were you. Tack's followers can't be entirely opposed to mingling. OT is dead, you know. Remember the 'grand alliance'?"

Proctor frowned.

The five-year-old episode still reverberated. In 1051 Jonny Tack had come to Ricardo with the Helium delegation. A technical advisor, or some such thing. Soon a passionate love affair had bloomed between Regina Unsler and the young man, despite the Crestmore prohibitions against the mingling of tribal and

structure seed. Had been an insane, trying time, that. Unsler had seen in this romance a new opportunity for expanding his power. For weeks frantic negotiations had been carried out under his orders to form a Grand Alliance between Union and Hinterland by intermarriage. Proctor belonged to the hard-line school. He had opposed the venture even as he'd led the negotiations, but fortunately the Accommodation policy, as it came to be called—favored both by Unsler and the Ecofreak council—was scotched by the intervention of the Older Tack.

"Don't remind me," Proctor said to French. "That was one time when I was grateful for the late OT. He made short work of that romance. . . . What about strategy? Did you get any hints?"

In the screen the tribesmen had reached West Tower's central shaft. The tubes rose quickly with the up-thrust traffic, bottom jets ablaze. The tribesmen were afraid. None looked down into the chasm and none looked up. None gaped at the many tubes, the movement of pod-shaped elevators, or at the common people moving up and down on hundreds of slide bars, arms and legs wrapped about the darkish rods. The men stared ahead with rigid expressions, terrified but much too proud to show it.

French said: "Bono said nothing. I haven't polled the staff yet. But I still stand by my predictions. They'll try to wreck us economically. Activists can't have any other strategy. The question is why they came to power. If we could answer that question, we'd know a good deal more. For the moment, the

best I can do is speculate, and I predict that they'll try for a Very Big as hostage—someone from the Meyer family, say. Then I expect that they'll ask for half of our plastosteel production, which would mean the end of expansion, population control. Unsler couldn't survive that. But I expect that they'll settle for thirty percent. If, that is. If. . . ."

Proctor looked back at the telscreen. "If we make a credible military gesture."

French nodded.

Proctor was silent. How to strike a deal with Activists? Their objective was total destruction—and he couldn't give them that. He had to find something they really wanted, something short of total war but more than economic damage. Perhaps he'd give them Portla structure in the north-west, a hotbed of Unsler support. . . .

He *had* to find a deal. The plot probably leaked like a sieve. The Group couldn't be held together for another five years.

"We must get a better feel for their strategy," he rumbled. "See if you can talk to the ambassador in a day or two. Barney *must* be unhappy with this bunch. He might play with us."

"If they tell him anything. I expect he'll be frozen out. Bono said as much."

"Barney can't be cut out that easily. And it doesn't hurt to try."

"I'll do it," French said, nodding.

"And you better close the loop with our people in the regions. I don't want surprises on the other coasts."

French nodded.

"Call personally."

"Will do."

"And let's talk about this tomorrow morning."

Through the telbooth glass Proctor saw the BTA staff people conclude their conversation. They waved to each other and passed out of sight. They reminded him of something.

"Rivera," he said, "one more thing. Have you talked with Darby Dickens today?"

French shook his head.

"We lost two more people to flame attacks last night."

"You're kidding."

"I'm serious," Proctor asserted. "Ten deaths in as many weeks. That far exceeds chance."

"Do you think Sidney is deliberately picking on BTA?"

"Of course, I do! And I think it's more than that. I think the flames are getting encouragement from Top Level. If this keeps up, I'll have to retaliate. Top Level is pressuring us—through the flames."

"Your popularity?"

Proctor stared into the screen, communicating with his eyes.

"That. . . and perhaps other things." French understood. The Secret Agenda. "Be careful," Proctor continued. "Don't move about alone. Always take some men with you on the movebelts, especially at night. I can't afford to lose you now."

A grin lit up French's face; his dimples showed. "I can take care of myself."

Proctor's eyes turned angry. "Balderdash," he rumbled. French still behaved as if he were a Branco

gangster. "Take people with you when you move about. Tell Darby to assign you a guard."

"I'll think about it."

"No, Rivera, *do* it. The conflict may deepen now that Ecofreak is here. I just insulted Blottingham. He also belongs to that group peripherally."

French nodded, amused and flattered by Proctor's concern. He had been on sixteen Hinterland missions and had come back alive. He was a Branco kid. Sidney's flames might harass the people all over the Acropolis, but they stayed away from Branco. A few noble sadists wouldn't have a chance against him.

"And come see me in the morning," Proctor said.

"First thing."

Proctor punched a button, and French became a single fading dot of light in the tiny screen.

INTO THE TUB

Bono stood before the embassy door and pressed the bell. Faintly from within came the first six notes of Woodstock. The door opened and he entered a terazzoed lobby followed by his retinue. A curved stairway led up to a second level where Barney stood tall and grave dressed in a white robe like a Very Big. His white hair fell down straight, structure style.

Bono walked up the stairs toward Barney. Pressure squeezed his lungs and eyes. Terror gripped his mind. His feet were lead. He had the urge to gasp for air in huge, noisy bursts, but he suppressed it. Barney seemed far away, blurred.

Barney looked down at the approaching Bono. *How young he is! And the delegation—a tableau of inexperience.*

He said: "Welcome, Mycal Bono, welcome to Ricardo."

Bono blinked. Barney was an Accommodationist and a man who, through the years, had lived in structures as Ecofreak's representative. A man you couldn't trust. Nevertheless Barney looked kindly. His hand was large and warm. Crows feet extended like rays from his greenish, solicitous eyes. Behind the ambassador, reflected in mirrors, Bono saw the embassy staff assembled to receive them.

He nodded to Barney, afraid to speak lest his leaden tongue slur the words.

"I knew your father well," said Barney. "We fought together against Maoling in the war of 1009."

Barney wondered how youngsters like these could have wrested the power from Franklin, Denton, Ruff and the others. Jonny Tack had demanded much in the way of information from the embassy, but he'd provided nothing in return since the shift. These youngsters would have to bring him up to date, whether they wished to or not. Something very big must have happened back home to vault the tiny splinter minority into the political saddle.

Then, noting the rigid look on Bono's face and surprised that the man clung to his hand, it dawned on Barney what the problem was.

I must be getting insensitive in my old age.

Simultaneously, he saw Bono's elbows jerk outward, saw the head

fly back, saw the chief take in air with a violent gasp. Barney felt a surge of pity for the miserable youngster.

"Smith, Duffy," he commanded sharply over his shoulder. "We have a five-percenter. Get the tub ready."

As the two men ran off, he turned back to Bono.

"Relax, son. You'll be all right. We'll take care of you."

He put an arm around Bono's shoulder and, dispensing with ceremonial, he guided the youngster through a corridor formed by the curious embassy staff. He walked slowly, knowing that Bono's feet must feel heavy.

Regardless of his ideology, he thought, a man's a man, and if he is a five-percenter, he deserves both pity and care. Will he be ready for the ball? Should I seek a postponement?

They went up a flight of stairs. Bono gasped without restraint now in that imitation of an epileptic fit that gravitron imposed on some. The worst part of it was the embarrassment. Adjustment reduced a man to a pitiful caretaker of a defective biomachine.

Up ahead, in an open corridor, closed off by a wooden rail, Smith and Duffy carried small sacks in hand—red gelatin. They scurried along. Barney heard the rush of water from the bath.

"It'll be all right," he assured Bono again. "A minute or two, and we'll get you relief."

He looked back at the group which had followed, a mixture of staff and delegates. He searched for his secretary. His eyes snagged on

Franco Dart. Now there was a familiar face. He nodded to Dart, a plan half forming in his mind.

"Martha," he called, seeing the woman at last, "get me a sedative and a glass of water."

He moved Bono slowly along toward the sound of water.

Bono let himself be led, his terror diminished. He let himself go. Mentally he gave himself over entirely to the care of others. In the bathroom, with water rushing into the tub, Barney told him to undress. He complied and stood naked on cold tiles, shuddering and shivering in fits. Two men stirred a red powder into steaming water. Bono smelled plastosteel and inferred that the red color of the powder came from that. His arms and chest were covered by goosepimples. The sheen of his skin was blueish beneath the tan.

The bathroom door opened a crack. A hand reached in holding a cup of water, some pills.

"Take these," Barney told him.

Bono obediently swallowed.

"And now into the tub with you," Barney said.

REGINA

In the late afternoon Sidney had jumped off the lip of his North Tower domain and after a long freefall through North shaft had landed by parachute in the Pit.

At his insistence Regina had been present. When the riots erupted, her bodyguard formed a ring about her and brought her back to Top Level West, considerably shaken.

She asked Selma, her favorite maid, to call St. Theresa of Carmen

on Level 188 Central and ask that Sister Serenita be sent to her at once.

Serenita came, a tall, severe old woman in a huge winged coif and blue robe. They retired to the meditation chamber of Regina's extensive domain. Regina lay down on the couch and Serenita, seated beside her, read to her calmly from the Biblibooks until Regina fell asleep.

Selma awakened her some time later. Serenita had gone back to the convent again. Regina was momentarily confused. She had dreamed about Serenita, a confused jumble. The nun had spoken about the Great Change, whatever that signified. There had been some business with a turquoise ring.

Selma was excitable, and her eyes opened wide and resembled fried eggs.

"Mistress," she cried, shaking Regina, "come quickly. We've spied some tribesmen near the Desolation. It must be *them*!"

They ran through the chambers of Regina's domain and passed through a glass door to spiral stairs that led up to a rooftop garden covered by many small domes of drilla-glass. In the west the sun reddened the horizon, but there was light enough to see the clump of horsemen through telescopes. Presently the tribesmen plunged down the side of a small rise, and soon they were obscured by dust.

Regina sighed and walked pensively back through the lush tropical vegetation of her garden, down the gravelled path, to the spiral stairs, stirred into memories of Jonny Tack.

She said to Selma: "Roll a visiset into my favorite room. I'll watch them on the evening news. Meanwhile I'll take a bath."

Selma Said: "Mistress, Clafto Meyer called while you slept and said he must speak with you."

Regina frowned and didn't answer.

Mention of Clafto set her brooding, and she still pouted in her marble bath, lounging in the recessed, oval pool while fountains played all around her. Mounds of foam lay on the water, and she flicked the fluffy icebergs toward the cone-mountains of her deeply tanned knees.

She thought of the abject slavery Sidney imposed on her by his brotherly violence, her father's inaccessibility, and swarthy Clafto who, chosen as Sidney's latest favorite, now demanded the use of her body.

Then, with a rush of reassurance, she remembered something Serenita had said the other day.

Serenita had said: "Darling girl, I pray for you daily. I commend you to the Virgin Mother Mary, the Star of the Sea. She has turned her face from me for a long time, sealing her ears to my prayers, but yesterday she smiled. I do believe she has now heard me, and you'll be granted your dearest wish."

Regina sighed in the pool. Then she rose and water pearled down her body. The scent of her bath oil lay on the air. Her chemist had concocted it for her. No other oil in Union had the same lubricity or the same fey smell. She tingled with pleasure all over as she rubbed herself dry. Her nighty, genuine silk

from Maoling, snuggled softly against her flesh. She wormed her feet into half slippers and they beat on her soles as she walked to her favorite room, a circular cubicle cut off at one end by a full-length, gold-laced mirror. She dropped down on the low divan where she and Jonny had striven in love, their bodies reflected darkly in the glass. She reached for a sugared crisp-strip in a white bowl and activated the visiset Selma had rolled into the room.

Jonny Tack. She remembered him vaguely, alas. Five years had wiped off everything except a few great strokes. He was tall and powerful. He shaved his head except for a spot on top of his skull from which had sprung a long horse-tail of hair. Jonny had never smiled. He had been rough, tumultuous in love. His blue eyes had glazed when he'd desired. Once satisfied, he'd always cursed her, calling her a wanton temptress, black of mood and tortured by some kind of guilt. But he came back always after a while.

The news had not yet begun, and Regina looked at herself in the mirror.

She was aristocratically tall. Her legs were pulled up and half hidden by pillows. The grey-blue nightgown was low-cut between firm breasts and decorated with yellow stars whose points were long like lights seen through drilla-glass. Her high cheeks now showed a bloom. Her pouting lips were full. Her eyes had the brooding look of one who'd loved and lost. She adjusted her red hair. It now hung down to her shoulders, although ordinarily it would have been piled high to show

the swan-like arch of a delicate neck.

She thought: *I've become a woman since those days.*

She reached for and crunched another sugared crisp-strip between white teeth. In mid-bite she stopped, the strip protruding between her lips.

For a second she had thought she'd seen a tribesman, but it turned out to be merely a man in a beaded jacket advertising an ethnic eatery.

She crunched up the strip and licked her lip with the tip of a pink tongue.

The news came at last. The word 'Helium' flashed on and off at the bottom of the screen. She saw pictures of the tribesmen on horseback, in the reception hall under the blaze of chandeliers, in jump tubes travelling through the Acropolis.

The commentator said: "Mycal Bono, Ecofreak's negotiator, arrived in Ricardo tonight. He was met by Rivera French, a high-ranking BTA official. Mr. Bono had no comment for Media. He retired at once to the Ecofreak embassy in East Tower. Observers here expressed surprise at Bono's youth. Concern has been voiced that Union's Helium needs will depend on the sagacity and skill of so inexperienced a man, a virtual unknown. Reston Proctor, Union's chief negotiator, sees no basis for concern and once more denies persistent rumors that this round of negotiations will be hotly contested. Reliable sources within the Bureau, however, privately concede that rough times are ahead. Contingency plans have been dusted off and

stand-by air liquefaction units are reportedly on stream. Proctor himself is reported gloomy about prospects. He felt hemmed in by the Accommodation policy and darkly hints that 'the worst' may happen on this round. Top Level spokesmen refuse to comment at this early stage and reaffirmed the Unifier's absolute confidence in Proctor."

Regina barely listened. She gazed with fixed concentration at the flashing images of Mycal Bono. His dark, brooding eyes and black, forked beard made her pensive.

I could fall in love with him, she thought. I like that name. . .Mycal. It's the name of an archangel in Serenita's Biblibooks. He isn't like Jonny, of course, but he seems more. . .sensitive. A little sad, I think.

"In other news. . ."

A sealing crew maneuvered a section of plastosteel into a gaping hole of Portla structure. The structure renewal had gone smoothly. In Laystruc four mushtanks had been poisoned, and Media showed emergency supplies brought in by air from Frisco. Several jumpball innovations were shown.

Regina plotted. The opening ball was a week away. She decided to wear a green sheer-gown for the occasion, the one with the coiling snakes all oriented suggestively (their split tongues extended) toward her center. She'd spread pink tint across her eyelids and hang her neck with silver bells. She'd daub Volcano behind her ears, across her wrists, in the crook of her arms. Her cosmetician said that Volcano vaporized in body heat. "It's like incense burned in your blood," the

woman had said, presenting the phial. "Just for you," the woman had said. No other lady in Union could afford the price.

"In another spirited display of leadership courage, Sidney Unsler, the Underunifier, today demonstrated the art of parachuting. . ."

Angrily, Regina looked up at the screen.

Sidney stood at the lip of the shaft, a foolish grin on his long face. Torches smoked in his gloved hands. He leaped out over the chasm lip, torches held high and away from his body at an angle. His motion imitated that of a diver.

For a dizzying moment the cameras followed Sidney's spread-eagled freefall through the lighted shaft, an infinite depth down. Then cameras deployed on lower levels picked him up as he came, his torches blazing, a dot that became a man, that flashed by like a bullet. Next they showed the parachute furl out of his backpack pulled by a lead. The striped silk cracked open and Sidney swung down. Finally, they showed him standing at Pit level, an idiotic pained grin on his face. The collapsed chute could be seen trailing from his harness and out of the picture.

A Media reporter interviewed Sidney. Sidney prattled about the exhilaration of freefall.

Regina jabbed the visi control and the picture went blank.

They hadn't shown the deaths and the riot. Sidney had collided with three unsuspecting people in jump tubes. Two girls had lost control and had fallen with terrible screams to the bottom. His parachute had pulled four children

from slide bars around level 70. They too had died. Rioting people had erupted from several levels and, crowding the slide bars, had descended to Pit bent on revenge. Regina had been down-bound in a tube. Police had stopped her. Down below they'd battled to save Sidney's life.

She thought: *How I despise him, how I loathe him!* She slipped her feet into her fluffy half slippers; they slapped her heels as she strode off to bed. She thought: *I must marry into the tribes before Daddy dies and Sidney takes over. Bless him*, she thought, meaning her father. *Bless Accommodation.*

II

SILCOPLAST

Tradition decreed a one-week gap between a tribal reception and the opening ball—time enough for the Adjustment, time enough to renew acquaintances, to get an informal feel for the other side's negotiating position.

In 1056 the Ecofreak delegation kept to itself. Bono was a five-pcenter and lay in the tub. The delegates were new and had no friends in Union.

Only Dart had had structure experience, but his last stay in Ricardo went fifteen years back. He had time on his hands, and he used it to look at the Acropolis.

He toured Ricardo with a young tribal attache and found the city much the same as he had left it—physically. The pentastructure was fixed in design and couldn't be transformed like a tribal settlement. But details had changed. The crowds were thicker and the physi-

cal plant seemed poorly maintained except at higher levels, of course. In Dart's day Ricardo had been a riot of psychedelic color, music, and sensuality, of which only traces remained.

The mood of the place was subdued somehow, and when he asked his guide the reason why, the youngster ascribed it to rot at the top: "Unslar is old and ailing. His brain is turning to mush. He clings to power but won't exercise it. His aides act for him, and his precious son rages through Ricardo unchecked. Things have really deteriorated since the Proclamation when Bernie made his son Under-runifier. That was followed by executions and much mayhem of that sort. Life in the structures is different from life at home. Here everything is integrated. When the chief is sick, everyone sickens."

Dart answered a little huffily: "You don't need to tell me that. I'm an old structure hand myself."

One time they toured a lower level and Dart saw an urchin selling hand-printed scriptos. Such things were illegal; Media controlled all communications. Dart bought a copy of the rag and found it filled with the gruesome escapades of someone called Fink.

The embassy aide explained. "Fink is their word for Sidney Unslar, and it's a mild word, if you ask me. Sidney is a degenerate. He thinks he is the reincarnated person of a mythical hero or god, someone called Julius Caesar. Young up-level nobles have formed a cult brotherhood around Sidney. They call themselves flames and call him *Ignis*, meaning Fire in latin. They

all study latin and use the tongue in secret conversations. They have initiations and fight duels with short Roman swords and round shields in a room set aside for that purpose in Sidney's domain. All this wouldn't bother a soul, but they also maraud through Ricardo at night—drunk, as a rule. They rape and loot for the sheer hell of it, and the police look the other way, of course. You can imagine Union's future. Sidney takes over when mushbrain dies."

"I take it you don't like the Unslers."

The young man laughed. "No, indeed!"

"You should be pleased. A weak Union means a strong tribe."

"I'm an Accommodationist myself," the young man said, suddenly brusque. "It gives me a pain to see the High Culture decay."

Hearing this, Dart cancelled the evening excursion they'd planned. He didn't want to be associated with a vocal Accommodationist—and the entire embassy was riddled with them. Only one man, Dulsol, the chief of maintenance, appeared sympathetic with the Activist cause.

Dart sat in the embassy's library that evening when Barney approached him and suggested dinner for old times' sake. He left the choice of restaurants to Dart. Dart recalled a cozy little place on Level 68 North called the House of Eighty-two Flavors. They went there the following evening.

They dropped down East shaft, crossed to North by the intertower beltway, and went down to Level 68.

From the tower's central shaft,

narrow streets fanned out like rays and fed traffic to Inner Ring, the first circumferential. Sixty-eight was a labor quarter with low ceilings. They parked their tubes in a garage and went in on foot. They found the feeder street deserted and discovered Inner Ring blocked by huge inflated bags, one on each side. Through a gap between the bags, people slowly passed into the interior eyed by police in blue uniforms.

Dart pointed to the crowd and asked what it was all about.

Barney said: "That's a roundup, Franco. Remember the riot of a few days ago? Media filmed Sidney's jump. They also filmed the riots. Now they're rounding up the participants."

"How? How can they possibly pick individuals out of this mob?"

The people of Union all looked alike to Dart, especially those on lower levels who, deprived of the luxury of artison, had blue-white faces. They looked like things you might find at home under a rock.

"They condition the police to remember the faces. They sit in front of viewing screens for days on end. Their recall is also boosted by a mnemonic drug."

They joined the crowd at the rear and shuffled forward as it moved. Barney towered above the people, a giant in a white robe. Dart saw several people pulled out of the line by police. One older man in the green jump suit of nutrition tank attendants protested his innocence with vigor. His fat mate came to his aid swinging a plastic shopping bag. Both were dragged away.

"What'll happen to them?"

Barney turned a thumb toward the reddish netting of the flexoplast.

"Surely you're joking," Dart reacted. "They wouldn't execute them for rioting, would they?"

Barney saw this as an opening for the attack he planned, and so he arched his eyebrows, said: "Where have you been, Franco? Don't tell me you don't know about conditions in Ricardo. Have those youngsters cut you out of the cable traffic?"

The remark *hurt*—it really hurt. Dart mumbled something.

Barney persisted. "What *is* your function on this delegation, Franco? I've assumed all along that you're the Number Two."

At that point, to Dart's relief, a policeman noticed them and waved. Barney's white robe meant Very Big!

"Look," Dart said, ducking the question. "They're pointing."

They wormed their way through the sluggish crowd and soon were past the barrier, walking along Inner Ring on the stopped movebelt.

Barney didn't renew his question. It had served its purpose. He already knew Dart's rank. Dart, for his part, mumbled to himself. He *should* be Number Two. He consoled himself with the reflection that even Bono had no real authority. He was merely Jonny's mouthpiece, not a plenipotentiary.

They walked through a desolate neighborhood. Broken furniture and garbage piled beside the movebelt testified to disposal chute clog-ups. Many windows were broken in buildings to either side. Some of

the overhead lights were out. Wild, loud, bold-eyed children played in the streets despite the advanced hour.

As they walked, Dart began to speak about the House of Eighty-two Flavors Charming atmosphere. . . eccentric chef. . . . memorable dishes. The shabby neighborhood compelled him to justify his choice.

The place was disappointing. A smell of burned grease hung about little tables covered with an oily, checkered material. Little candles burned in colored glass. Slick gangsters in jump suits lounged idly in the back. How memory deceives!

To Dart's relief Barney didn't seem to mind. He said he rather liked the place. In the filtered light of the candle, his face seemed amused. He joked about Dart's adventurous past. Dart was a deep one, he said. Sly but deep. When the girl came, Barney ordered a bottle of wine.

After the second bottle had been drained and food was on the way, Barney looked up at Dart's flushed face. Time to get down to business. He had a date with French for the next evening, and he meant to give French some advance intelligence about Ecofreak's demands. Tack's inexperienced Activists had no idea how you worked a Helium round.

Now the time had come to pluck the vail old cock's dry feathers. To hear him tell it, Dart had been the terror of Union, the savior of the tribe.

"Ah, yes," Barney sighed. "Those were times. . . But nowadays. . . Tell me, Franco, how do you assess these brash new kids?"

Dart glowed with wine and memories. "With a bit of wise and seasoned advice, they'll do all right," he winked.

"But will they listen?"

"It takes a bit of skill and diplomacy," Dark admitted. "Finesse, my dear Andros, finesse."

"I'm pleased to hear you say that, Franco. They need a man like you. Desperately. Your role is extremely important. You provide that link between experience and energetic youth. It's a very responsible and subtle role. I don't envy you the job. We must work hard to save the tribe from reckless foolishness. With you in the inner circle, I'm not so worried about developments."

Dart compressed a smile into a pleased smirk. If Bono would appreciate his role as much as Barney did. . . .

Barney continued: "I suppose that you've approved the general negotiating plan. I'd feel better if you had. I realize that my own position is somewhat ambiguous, what with my strong ties to the Accommodationists. But Tack hasn't removed me, so I expect that my loyalty is not in question—and I'd like to help. It's unfortunate that Bono is having such a hard Adjustment. Time is wasting. By now we should've had one or two informal chats with the fellows from BTA. They must have some early warning as a matter of courtesy, at least about the hostage question. I'm sure you did that sort of thing when you were first secretary here. In short, Franco, I thought it best to sit down with the only man in charge who's on his feet rather than in a tub —"

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Incidentally, have you seen IMAGINATIVE SEX by John Norman? A fun book if ever there was one!

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and at these words Barney grinned "—and see what orders you may have for me."

Dart drew himself up in his chair. "As a matter of fact, I agreed to this delightful dinner because I had the same intentions. I did approve the strategy—reluctantly, Andros, very reluctantly. I meant to discuss the matter with you. Privately, of course. . . ."

"Of course."

"Chief Bono and I are not entirely. . . ."

"I understand," Barney hastened to say. "Old diplomats like us know the value of discretion."

"The *real* work is done like this," Dart persisted, "privately."

"My view to a fault."

"Well, Andros, Tack is determined to obtain the silcoplast parts, you know." Dart watch Barney's face, but Barney gave no reaction.

"The silcoplast parts," he said evenly.

"And to get sufficient leverage, he intends to ask for Sidney as hostage."

"Sidney Unsler as hostage," the ambassador echoed.

Dart nodded with a gleam in his eye. "Sidney Unsler."

He thought: *Barney must be surprised, though he doesn't show it.*

Dart went on: "In addition, that is to say to add more leverage yet, he'll ask for eight hundred thousand tons of plastosteel."

"Ten times the usual demand," Barney said without intonation. "He must want the silcoplast parts very much. What are they? Zippers? Buttons? Hairpins?"

Dart heard the sarcasm. Once more his eyes lit up. "There are

some things so secret only the innermost circle is privy to the information. But I can give you a hint, ambassador. There's been a breakthrough!"

Barney extracted a small coin purse. The cheap article was made of sil. Barney squeezed the flat round object. A slit in its top opened like a mouth. He repeated the motion once or twice more. Then he put the purse away.

He said: "Would this have to do something with the Kaysee labs you Activists have been funding all these years?"

"I am silent," Dart pronounced, but his eyes gleamed.

"Why?" Barney probed. "Why do we ask Union to give us SP? Maoling is a major producer, and so is Peacefreak. Why don't we get it from them?"

Dart raised his eyebrows. He was enjoying this. "Welded SP? Does Maoling have the clean rooms? Does Peacefreak have molecular micro-welders?"

Barney stared into the candle and thought about it. Silcoplast was a common synthetic derived from silicon, cheap to produce, reasonably gravitron resistant, and much more durable than the hydrocarbon plastics it had replaced. What else? Then suddenly he thought he had it and, reflecting upon it, he *knew* he had it. Sil was also a laboratory curiosity. Low level energies transmitted through the stuff generated a curious field that inhibited all types of nuclear core reactions. But the inhibiting oscillations were random—had to do something with the crystalline structure of the silicon-carbon. Sometimes it

worked, sometimes it didn't. Barney decided to test Dart. The little man revealed his every emotion.

"You've learned to control sil-oscillations. In effect you've got a . . . a bomb inhibitor."

"I am silent," Dart replied, but his eyes flickered.

"Perhaps you're free to tell me this: Why don't we build our own clean rooms, our own molecular welders?"

"That would take years. Jonny has little patience. He wants to act now."

Barney nodded.

A lardy woman brought their food, a circular tray with seven dabs of tankmush, each with a unique flavor. In the middle of the tray lay limp sticks of simubread. The idea was to scoop the mush with the bread.

Barney let the silence build while he fell to. In Hinterland the old men read the Crestmore bible again, fingers on that passage about the bastions of the whore. Like a malignant virus the Activists had lain dormant until this time. Now they had the argument that no one could refute. "We have it in our power to topple the structures. The Abomination shall be humbled. We shall break the back of the Technology Beast. No more threats, people of Hinterland. Their missiles shall never strike again. In the heart of every town we shall build a generator, and their bombs will fall like rocks but won't explode." The little people didn't know this, needless to say. But the members of the tribal council must have heard Tack's eloquence and voted to send Franklin, Denton, Ruff and the

others back to their wells and ranches, dispossessed—the noble cause of Accommodation dead, displaced by the pointy-eyed wrath of the Crestmore zealots. The assessment made sense. It must have been thus.

Chewing, Barney looked up. He took a sip of wine, swallowed, and said: "The strategy stinks. And it's juvenile. Union will smell a rat. Tack has lost his marbles. All you Activists are crazy. Here's what'll happen, Franco. Proctor will run to Harvanth of Defense, and the two of them together will see the Unifier. Unsler will have to pay attention to this one. He'll give Proctor permission to attack—selectively, of course. They won't stop until all of our production capacity is destroyed—all but the essential refineries, of course. They won't touch the Helium. The irony of it. . . . Union will destroy *our* technology. This is the Helium War of 1011 all over again. How many of these components does Tack want, by the way?"

Dart wiggled uneasily. "I can't tell you that."

Barney laughed. "Franco, don't be silly. You must. You've already blabbered out too much. We're conspirators, you and I. You must confide in me."

Dart protested: "I didn't tell you anything of importance."

Barney cocked his head and smiled. "Of course you did. You gave me the hostage demand—another really jejune notion. I suppose Tack thinks that Union will give up the parts if we relent on the hostage question. Where have you people been these last few decades.

This is no way to negotiate! You should have asked for micro-welders, not for the components. Insane! Well, how many?"

Dart stared glumly.

"Franco, out with it. If you play games with me, I swear I'll cable Tack and expose your blabber-mouth."

"Fifty thousand."

"So many? Why. . . that's almost one for each tribal settlement. Why the sudden concern for other tribes?"

Dart stared ahead unhappily. He didn't touch his food.

"Explain it to me, Franco."

"There's an alliance."

"What?!"

"Jonny has formed a tribal alliance. It's called the Counter-union."

"Sooooo! Well, that explains a few things too. Far too many ambassadorial changes lately. Hmmm. Jonny has ambitions, then. He wants to bring all of Hinterland under his protective umbrella. . . But eat, Franco; try this peppery stuff here. Not bad."

"I'm not hungry," Dart said. Then, after a moment: "What'll you do, Andros."

"I'm more discrete than you, Franco. I'm not going to tell you. But, as the saying goes, a hint is permitted. I expect to look out for the Accommodationist cause."

THE HARVEY HARE

In the alternating cycles between dumb pain and almost disembodied vision, Bono had lost track of the passage of time.

Somewhere in that murky chunk of duration, a physician had installed a needle into his arm. Sugar flowed into his body through the hose that linked the needle to a bottle hung on high. He wore a strange pair of rubber shorts from which his wastes were pumped out. In lucid moments he could hear the pump cut in and out at intervals. The rest of him, up to the neck, was submerged in jelly. It trembled with his every breath and exhalation.

Some chemical in the sugar or the gel interfered with his brain chemistry. Time and time again he dozed off to relive with minute variations a single experience—his last day on his father's ranch on the Plain of Baez, a vast expanse of mutagrass steppe closed off in the distance by the jagged blue line of the Sierra Blanca.

He hunted the giant Harvey hare, one of many curiosities created by radiation's disorderly invasion of the chromosomal world. He was again a half-naked fifteen-year-old armed with a crossbow, stealthily stalking through shoulder-high mutagrass toward the grazing beast. The Harvey raised its head from time to time, ears erect, listening. Then the head went down again and the hare fed invisibly on young mutagrass sprouts that issued green in spring and autumn. When the Harvey ate, Mycal crept forward, the wind in his face. When Harvey listened, he crouched. Cricks chirped harshly on all sides, and a flock of carries, sensing a feast, glided in a far away circle against the sky.

Kilometers away a large transport copter landed near the ranch house

and a group of boys clambered out. They stood about in a half circle and threw rocks at a scarecrow while the pilot went inside. The copter belonged to the Activist Academy at Wellhead, and it had come to fetch Mycal for his first term. It meant the end of his care-free days.

Men on horseback soon rode off to find the youngster.

Oblivious of all this, Mycal crept forward. Fifty meters from the beast he picked up the musk-scent of a female. He paused and checked his dark, oily bow, the cranked-back wire, the blunt bolt. Then in the high tones of a boy whose voice had not yet changed, he called: "Har-vey! Har-vey!"

The she-hare rose, a large white apparition. She sailed from Mycal in the first zig of a zigzag course. He had anticipated the initial direction. When the hare zagged, they were both heading for the same spot like lines of a triangle on a collision course.

The hare was faster than the boy and reached the magic spot where obscure instinct made all Harveys stop for the cloying counterattack. The Harvey turned and stopped. Her red eyes were sad with an unspeakable sadness. Her ears hung down accentuating the pitiful look. Her paws were bent in the manner of a begging dog.

Then the telepathic pulse hit Mycal with full force.

He had only a second to react.

He felt a sensation of pity, love, and concern for the hare. The beast appeared to him not as it was—a white giant, a half ton of muscle and sinew wrapped in a fluffy pelt

that brought three hundred suds in Merillo. Harvey seemed a tiny, sweet, and utterly helpless baby rabbit, a lost little thing. Mycal's eyes watered with affection.

Tribesmen thought that the Harvey hunt strengthened the character. Mycal had killed seven hares in the course of growing up. He knew how to choke down the pity. When the beast zigged again, he let the bolt fly. She gave an agonized shriek and fell out of sight into the grass.

Her shrieks continued, and he went after her, hard and pitiless inside. She lay on her back and spasmed, pink nostrils gushing blood, red eyes terrified. He felt the terror as if it were his own. Nevertheless, he knelt beside the beast and slit her throat with a wide-bladed knife.

She was his eighth hare.

Bono relived the experience time and time again. The dream changed shape. Sometimes he called and there was no Harvey. Sometimes he shot her and she fell dead at his feet. Sometimes he missed. Yet again he joined in her pity and embraced the hare with a rush of emotion, and the two of them cried in each other's arms like people.

Awakening with a shudder, he felt the inrush of discomfort. The pressure descended on him. His breath grew heavy and he began to gasp for air. He could swear that a chemical interfered with his memory.

Bono had devised a method to escape the trauma. He concentrated on his heart beat, on his breathing. He took one breath at a time. In . . . out. . . in. . . out. . . in. . . out.

Silvery, swaying, there was the Plain of Baez. In the distance stood the Sierra Blanca. Mycal stalked through the shoulder-high grass. The Harvey looked up, ears tall and trembling. . . .

CARELESS IN THE PIT

French met Barney for dinner in The Mutant, a fashionable but disrepute up-level eating place in West Tower. French chose roast veal with autumn potatoes; Barney ordered cricklegs in wine sauce. Not everyone in Union's structures ate flavored tankmush. The very rich and very poor had access to real food as well. French picked up the ninety-sud tab; it was a bargain considering the information he had gained.

They parted in the tubepark adjoining the restaurant. French found his official BTA tube, a red-white striped affair. He headed out to find Proctor. A flame had left the restaurant some time before and, spotting French's tube in the lot, had hidden in the shadows. Now he followed French at a distance. In his excitement, French didn't notice the surreptitious pursuit.

The time was ten forty-five at night or fifteen minutes after the scheduled start of the late-night jumpball game. Tonight Proctor had the Leader Box and French made for Central's collosseum to catch Proctor with the news.

When he arrived he noticed at once that Proctor hadn't made his appearance yet. The people roared with unhappiness and stamped on the thin plastosteel floor so that the

collosseum trembled. A band played on the field below, but crowd noise almost completely obliterated the sound.

The Leader Box was on the upper level, accessible by the wide corridor that went up around the place in a spiral. French stopped along the way and chose one of a bank of empty telbooths. He closed the door to dampen the noise, dialed Fred Clemmens at his cubohome. Clemmens was director of the technical division, one of three operations under French in the Office of Intelligence.

The man appeared in the tiny screen, older and balding. A towel hung around his neck.

French said: "Fred, what do you know about silcoplast?"

Clemmens raised his eyebrows.

French went on, a little amused. "Ever hear of a silcoplast wave modulator used in a telcom net?"

Clemmens said: "Riv, what is this? Some kind of practical joke?"

"I am serious, my friend. Eco-freak will ask us for fifty thousand silcoplast devices or components or switches or whatnot; they claim they need them for a communications system. I searched my brain, Fred, but somehow the demand didn't make sense."

Clemmens shook his head slowly. "It doesn't; not on the face of it. Are you worried?"

"Aren't you?"

Clemmens made a face. "Frankly, Riv, you've made me interrupt my vibromassage, so. . . ."

"Do you have contacts in the SP industry?"

"Some, yes."

"Well, Fred, I want you to get

on the tel and have the best sil-chemists in here by tomorrow morning."

Clemmens said: "You *are* worried. You sure? The SP centers are mostly in Husten, Norlens, and Laystruc. Should I. . . ."

"Yes. Fly them in overnight. I think this is a big one."

French signed off and went on his way.

Through vaulted doors spaced at regular intervals, he could oversee the colorful crowd and the green field below. The crowd was in an angry, ugly mood. Hate vibrations filled the air. Roused structure crowds were dangerous, especially sporting crowds. The leader had made them wait for more than half an hour. Clearly people didn't know that they waited for Proctor.

French walked between two openings, bare, scuffed wall on either side, when the noise suddenly intensified, died down. He hurried forward. Even before he reached the next door, he heard the announcer's magnified voice.

"Here he is, jumpball fans. The games are on. Reston Proctor, the Chief Negotiator."

At the mention of the name, the crowd fell silent. It held its breath. Then a wild cheering started and grew in intensity.

French had reached the door and stopped to watch.

Light from the floods glared off the bullet-proof, chem-proof glass of the Leader Box. Proctor was *not* visible inside, and the crowd wanted to see him. It took up a chant. "Proc-tor, Proc-tor, Proc-tor."

Then French saw movement in

the box—a blue robe flashed. Cheering and whistling much more intense than before displaced the chanting. It lasted a long time but, finally, slowly, it died out.

French walked on, thinking about Proctor's popularity. Media had issued two books in as many years glorifying Proctor. *Boss* and *BTA In Action*. For three years now a visishow ran on Saturday nights called *The Hunt*. It had an 'organization' much like the BTA, an 'old man' who resembled Proctor, a black security chief—black like Darby Dickens. Proctor's engineered popularity was all part of the Secret Agenda. Hondo Weinberger, one of the Media Bigs, often lunched with Proctor in BTA's executive dining room. He was not the only one.

It was a measure of Unsler's decrepitude that he tolerated the obvious self-promotion of one of his agency heads. . . and a measure of Sidney's stupidity that he appeared not to notice. Or perhaps Sidney *had* noticed—hence the recent harassment.

Outside the Leader Box stood one of Dickens' men.

"Mr. French, I'll have to search you."

"Me, Harlow? For God's sake, surely you know *me*!"

"Sorry, sir. New orders from Dickens. Everybody must be searched. No exceptions. It's the flames sir."

"More trouble?"

"Not so far this week, Mr. French, but we're on a general security alert."

French handed over a pistol he'd checked out of the security shop some days ago. He'd considered

that precaution enough against the flames.

He said: "Here. Now you can be sure I won't shoot the Negotiator."

"Yes, sir. Go right on in."

French frowned as he walked down the aisle of the Leader Box, his eyes on the players. Some floated in the air, maneuvering with boot and elbow jets. Others stood on the ground in patterns of defense and attack. French scorned the game. He belonged to the die-hard set that resented the game's debauchery by the addition of Fulbright's gravitron webbing. The classic collision of forces had become an awkward aerial ballet.

Proctor sat up front alone, absorbed in documents from a briefcase. French pulled up his robe, sat down, and gave his report. Barney did not think that the Activists would last long. He had hinted pointedly that Ecofreak should look out for some electronic components ostensibly meant for a telcom system across four radiation belts—Barney hadn't said anything specifically, but that had come across clear as a bell. Sil-components welded to copper. Those parts would play a key role in the negotiations, French said. Then he reported on the predicted plastosteel levy and the hostage demand.

Down below three men in red crashed against the tripple-decker flywall, zoomed down. Ground guards felled them with loud snaps of equipment.

Proctor stared at the groaning crowd.

"Sidney Unsler," he rumbled. "That's interesting."

"It doesn't make sense," French

threw in. "Either they are incredibly naive negotiators—or else I'm missing something. I think it's a diversion, Res, an attempt to make us focus on the hostage question. They'd rather we don't think about the things they really want. Technology. The sil-components. Barney almost said as much. You just don't ask for the Underunifier as hostage—not in this day and age."

"Very interesting," Proctor mused.

French asked, "What do you make of it?"

Proctor glanced at French, a little wary. "You know how I feel about those intelligence estimates."

"They're the best we have."

"Sure, sure. Still. . . Rivera, I sense trouble. I suspect these 'Activists' of yours, and the demand for Sidney makes me nervous. Suppose they insist on the demand, insist hard enough so that I'm forced to take it up with Unsler."

"So?"

"So I take it up with Unsler—and suppose Unsler says 'Yes.'"

French was genuinely puzzled. "Why would he do that?"

"Because he wants Accommodation. I can see it now. Sidney in Hinterland. Sidney hobnobbs with tribal leaders. Sidney forms close friendships."

"With Activists?"

"If they're Activists."

French didn't hide his irritation. "Res, they *are* Activists. I have no doubts about it. I've been out there." He gestured with an arm. "I've seen the sour bread."

"You're too brash, Rivera, too damned cocksure."

For a moment both men were si-

lent. Down below whistles shrilled and flags dropped from the rafters. French broke the silence.

"The key is in those silco parts. Barney's hint was—hell, it was a slap in the face. Hint isn't the right word."

Proctor shrugged. "Maybe. Maybe not. Maybe they *want* us to worry about the technology. Besides, technology is one of those things with Ecofreak. They always want some damned oddity. The last time it was laser drills—but nothing happened."

French said: "I'm suspicious."

"You're always suspicious," Proctor countered. "You've got a fetish about technology. You were suspicious in '51, but nothing happened, like I said. Those people are like monkeys. They like to play with gadgetry. It's like sex with them. Because the Crestmore forbids it—*therefore* it has appeal." Silence. "Sidney Unsler. That may be a brilliant ploy." He thought about it for another second. "At any rate, we must wait for more details. How is the Helium situation?"

"Flow is back by thirty percent—the usual thing. All the structures are holding. Four or five days inventory, roughly."

"Air liquefaction?"

"The stand-by units are all operating and they compensate for the shortfall. But it's the usual problem. We're having one hellish energy drain. Just not enough fusion capacity for everything—gravitron, services, and air liquefaction."

Proctor nodded. "High time we start the talks. The ball's tomorrow,

and the first session the day after that. By the way, I *did* wangle an invitation for Miri. It was like pulling teeth, but she's invited."

French smiled. "Thanks," he said. "Miri has been after me for months. Though search me why anybody would want to go to a Top Level dance."

"Women," Proctor said in the tone of a confirmed bachelor who has long ago stopped trying to understand the mystery.

They talked for a while longer about concurrent talks with Maoling and toxic metals in a shipment of lettuce delivered recently. French noted down some assignments and finally left.

He headed south by the inter-tower beltway. South Tower was a pattern of random lights ahead. He lived with Miri on Level 118. He wondered if she still waited up for him. He longed for her company.

He thought: *What makes me disconsolate?*

Laser drills, his mind answered instantly.

Yes, laser drills. They symbolized for French Proctor's contempt for all technical matters, his preoccupation with politics and personalities at the expense of gut issues.

During the last Helium round Ecofreak had demanded and gotten five hundred laser drills despite the tribe's weak rationale. They'd claimed to need them for dental work, which was ridiculous. French had protested, had been overruled. Later he'd personally gone deep into Hinterland to find out how Ecofreak had really used the drills. The track had led to a research

center under maximum security outside Kaysee in Mogan Territory. French had returned more suspicious than ever, but Proctor had simply shrugged off the report. The pieces of the puzzle locked nicely. The Tacks came from the Kaysee region. Could those lasers have something to do with Jonny's rise to power? Could the sil-parts be another link in a technological chain?

He entered South shaft and, bottom jets blazing, began the steep ascent. Podlike elevators clung to the walls. Hundreds of slide bars glistened darkly between the elevator grooves. The chasm was empty, the hour late.

Near Level 80 a group of white-clad men in tubes shot out of a feeder nearly colliding with French. The timing of their entry convinced him it was no accident. Among the men were several prominent flames, including Clafto Meyer, the dark, swarthy plastosteel heir Sidney now favored as his first deputy.

"Watch were you're going, pig!"

"*Fratres*, that's no ordinary pig. That's a BTA pig, a superpig."

"We don't like BTA pigs, do we, *amici*? Let's teach this guy how to drive a tube."

French assessed the situation coolly. His standard issue vehicle couldn't outrun the expensive jobs these boys had. He had retrieved his pistol from Harlow, but the goons must also be armed. Stare them down? Talk them out of it? French had cold memories of many bloody Branco confrontations, many close calls in Hinterland. Old instincts stirred. His fatigue fled

under a rush of adrenaline.

The flames had begun to maneuver, forming a circle about him, even as they all rose in the shaft at maximum speed.

French guessed their intention. They would try to upend his tube, to make it tumble around and around until the centri-forces grew so great that he'd be flung free.

One of the men lunged, sidejets ablaze. French saw the mindless grin of a youngster. The feint didn't deceive him. He turned quickly and saw two others almost upon him. He chopped out with the edge of his hand. A man reeled back, coughing. He punched the other and shoved his tube aside. French saw two others dart forward from the corner of his eyes.

He couldn't win. This was their game. He did the only thing he could do.

With a flick of his thumbs, he cut out jets and gravitron and over-rode safety with his knees. His tube dropped from the circle of his pursuers like a rock.

French had practiced this maneuver years ago in training. The Death Drop. But this time there was no flexonet to catch him if he failed. An endless chasm yawned below. His fall accelerated, and his tube began to tumble slowly as it fell. French held on with all his might. He stared rigidly ahead. His innards liquefied. Physical terror clutched him. Forces tugged and wrenched. His knuckles grew white as he gripped the rail. His knees went numb against the tube.

The shaft turned helter skelter, now up, now down, a wheeling broken telescope of light. On one of

the turns he saw the flames in hot pursuit. But they came slowly, with jet power.

His mind wheeled. His brain lagged behind events. His thoughts flashed. *Flames, BTA, Proctor, Miri, Helium*. He had no time to reflect, but his body and mind were active. His eyes measured the height and counted levels. Around Level 20 he cut in the gravitron. Immediately his body grew heavy, his own weight nearly crushed him. The tumbling stopped slowly, but the inertial forces of his fall overcame the gravitron, and he went on falling at a sideways tilt.

At Level 1 he cut in sidejets. When the tube had righted, he let the bottom jets blaze. Despite these actions, his tube crashed on the concrete of the Pit and burst apart in a shower of sparks. French fell free and rolled some distance from the impact point before the tube exploded. A long flame shot toward him and licked his face.

He rolled from the flame and lay where he came to rest. He felt a pain in head and shoulder. He scrambled up and nearly stumbled over his own robe. Black clouds of smoke rose from the furiously burning tube.

Above him flames approached. He stared up into the chasm for a second, an endless tubularity. From this perspective it seemed to curve, to lean over him. He couldn't see all the way up. The shaft walls closed in and came together in a point.

French ran toward a corridor.

Roused from the dull routine of duties in a lighted booth, a pit guard waved his arms. BTA forces

secured the Pit, but the guard didn't recognize French. He ran past the man and into a darkness faintly lit by red lights. The guard yelled behind him. French ripped the purple robe from his body as he ran; it impeded his movements. He wore a simple grey jump suit underneath.

French knew Helium like few other men. He knew precisely where Ecofreak pipelines fed each and every Union structure, how the gas was liquefied and where, how the cold stuff flowed to the drums. He knew the layout of the Pit in every detail. But his memories went even farther back. As a boy he had explored the deep, dark catacombs below the Pit, the tunnels and bunkers of ancient Eastcoast on whose site Ricardo had been built. He knew where he was. He had several avenues of escape—sideways, up, or down. He stopped to orient himself.

That luminous exit sign up ahead would lead into one of the drum rooms and from there he could make his way into the interior of the structure.

He ran toward the sign freeing his pistol as he ran. He heard voices and the sounds of boots on concrete.

He ducked into the opening and fired at movement behind him. He meant to do no harm, merely to show that he was armed and dangerous. In the narrow confines of the corridor, the sound of the blast was deafening and made his ears ring.

He ran through an instrument room, face lit up for a second by green, red, and yellow lights from a panel. And from there, through a

door, beneath low-slung piping, he entered a gigantic hall so filled with the hum of vibrations that he couldn't hear his own feet hit the ground when he cleared some low steps.

Pain stabbed up his leg. He hobbled forward and ducked behind a huge, grey, loaf-shaped machine to catch his breath, massage the foot.

Hall A. Six giant generators stood in a line. Beneath the painted, yellow, concrete floor on which he cowered lay tanks of liquid Helium. Drums turned half submerged in the liquid. From the generator casings gargantuan strands of cable, each fiber as thick as a man, carried the pulse into a vaulted ceiling and, through the ceiling, to the plasto-steel framework of the tower.

He shook his head to clear the pain, blinked, and peeked past the grey-painted metal of the drum toward the door through which he'd come, toward the stairs he had descended.

His foot still hurt. He didn't dare attempt the run until he had assured himself that his pursuers had given up the chase. Just in case, he took aim with the pistol. He aimed it at the door. His hand shook so that he had to steady it with his left. When the door opened a crack and then all the way; when he saw a white-robed figure slipping through; he pulled the trigger without thinking. The shape fell forward and rolled down the stairs.

French blasted away until the door closed.

In the fantastic hum of the hall, he hadn't heard the sound of his own shots.

He waited a moment longer. The

man he'd shot lay sideways on the stairs. Blood spread a large circle of red on his chest.

French stared at the dead flame. *Now I've done it. Now they have a casualty!*

He was angry with himself, angry that he hadn't had sense enough to think before he'd shot. He could have eluded these goons. The consequences of his action came to him now. The death of a flame meant big trouble for BTA. A blood-bath could follow this. . . . *Goddamned!*

He gathered himself from the floor and limped past other grav-drums. He came into another hall where expanders liquefied Helium and stopped to decide on his course. The dead man would serve as a warning. No need to find one of the hidden passages to the catacombs. He'd make his way to a small elevator not far from here. The BTA master key would operate it.

He reached the lift without mishap. The elevator came, summoned with a button. He walked into the narrow box, punched 118.

When the register showed Level 60, French finally relaxed. He had been leaning against the wall. Now he let himself slide down to the floor. The pistol still hung from his fingers. Flames from the exploding tube had blackened his hand. Singed hairs curled at the ends. For a long moment French stared at the hairs as if they were a matter of the greatest interest. Then he broke his gaze.

He realized that he was very shaken. Energy had drained from his legs, arms, hands.

It took him a long time to put the pistol into the case.

He looked at his watch. The exquisite device, a gift of Miri's, had been shattered. The fine pieces of the micromosaic had been dislodged. The digits had stopped at 11:59.

MIRI

Miri French spent her evening at a meeting of her coven on Level 120. Most of the session had been devoted to a test of *mantuition*, the art of reading character from the aural energies that leave the human body by the extremities.

All ad-adepts had gathered in a small room. Two women and two men hired to help in the procedure had waited behind curtains in a dark room. Groping in the darkness that prevented the acquisition of visual cues, Miri had followed others to shake hands with the strangers. Then she retired to a cubicle next door to write down what she had learned from those brief touches.

Afterwards the coven elder sought out Miri over tea.

She said: "Miri, your analysis was almost perfect. You're growing stronger in the arts. Soon you'll advance the final step. Frankly, that pleases me very much—because you're marked."

Miri reached up involuntarily and touched a birthmark on her cheek. From time to time the elders mentioned that peculiarity of hers. Each time Miri felt a vague uneasiness combined with an inner pulsation as if a suppressed memory were trying

to surface. But the memory bounced up against a barrier of some sort.

To her the birthmark was simply a blemish. To the elders it meant something else. For months at a time they allowed her to forget that she wore 'Madonna's Mark.' But then, out of the blue, came another cool reminder. Miri found this maddening. The mark meant that she 'had a role in history.' Beyond that no one would tell her anything.

She looked up at the coven elder, a fortyish woman whose face was smooth as marble from the spiritual abrasions of meditation.

She said: "Mother, I may be marked, but I'm still childless. In my group I'm the only one who hasn't passed through that experience. I can't become a full adept until I have conceived. Do you think Frenchy is sterile?"

Miri kept her voice under control—the least of accomplishments for a member of the Cult. Even her eyes were steady. But the question stirred anxieties that ad-adepts were supposed to have put behind them. She hoped with unseemly eagerness that the Lady wouldn't test her to the utmost—that her Frenchy would be spared the grav-sterility that afflicted so many. Could she, a member of Madonna's cosmic body, be mated to a crippled male?

The elder smiled faintly. She reached over and patted Miri's arm. "You'll conceive, Miri. The mark assures it. Just don't forget to practice vision. Form a strong vision of maternity—but what am I telling you. You know all that. Tell me, are you bothered by something?"

"No, mother. . . yes, mother, I sense—I have an odd intuition. Something is wrong. I think it has to do with Frenchy."

"Let me feel your hand."

Miri laid her hand into the elder's who, in turn, eyes slightly narrowed, sampled Miri's mood.

The elder said after a moment: "A party, a dance. Some sort of great event. You're worried about some future event."

Miri laughed. "You're right. I'm anxious about an invitation to a Top Level ball. The ball's tomorrow, but I still don't know whether I'm going—and I want to very much."

"Anxiety is unnecessary. Now that you're an ad-adept, you could consult the Sybilline books—and you'll *know* whether you're going or not."

Miri looked down at her cup. "It's a trifle, really. And we're not supposed to trifle with the oracle."

The elder rose. "Of course, not, child, but we can make an occasional exception. Have you consulted the oracle about conception?"

Miri shook her head.

"There, now. That's not a trifling matter. You should trust yourself—and the Lady. Above all, Miri, avoid anxiety, practice vision. Practice, practice, practice. Until next week, then."

Saying this, the elder nodded and went her way.

Miri's tea had been laced with Millusion, and soon the effect of the drug manifested itself in a bell-like ringing in the head. She moved toward the assembly hall whispering with others. They settled on cushions on the floor. The lights

dimmed and visions appeared on the large curving screen.

Miri caught her breath as Earth appeared, a green-white magnificence, turning slowly against a velvet darkness. She heard music. The picture faded and others came in succession, brilliant visions of the world as it had been in ancient times, a riot of color and a shimmer of light, an exotic profusion of biological life, of jungles, prairies, animal herds, bird flocks, fish schools, and things that crept and crawled. The proud, beaked head of an eagle, the moist nostrils of a hippo, the shadowy whisk of a deer tail, the rush of wind in tree tops, the radiance of a screen of fish in coral, the glistening sweat on the bodies of men rowing a log canoe, the lumbering of a polar bear, a drop of water on a leaf. . . .

The beauty of it brought tears to her eyes. Millusion enhanced her senses, enabled her to become the marvelously varied life shown on these secret, ancient tapes. She'd seen it all before a hundred times, but ever and again the vision was fresh. She sobbed as she watched, knowing it wouldn't last.

The visions faded, growing lighter and lighter.

Now a throbbing, hissing, pounding, and drumming overlaid the music. The Male had entered the world and transformed it before her eyes. These also were ancient films—of tractors gauging the earth, of skylines forming and disappearing, of machines beating rhythmically, of smoke, devastations, penned beasts, polar bears bleeding, whales quartered and melted, parched land, poison fumes, sludge

lakes, landscape carved into geometrical formations by thousands of identical dwellings.

Miri held her breath and screwed up her eyes anticipating the blinding light and the explosions. They came. In their wake came pictures of today—of gaping craters, the uniform silver of mutagrass broken here and there by trees, the lope of Harvey hare, the flight of carries. She saw furtive mutant colonies hugging the edge of rad-belts, hiding in caves, burrows, huts, hovels. They hopped one-legged, roll-walked three-legged, crawled legless on rump-stumps. Beemen whistled bonily, tailed crick-eaters purred. She saw six children suck milk from a woman's six udders. Tribesmen on horses came to raid, poking spears into hovels, looking for reasonably humanoid shapes. Smoke rose from burning huts when the men rode away.

Last came a vision of the structures, one after the other, surrounded by Desolations. They flashed by faster and faster as the music rose higher and higher—and suddenly there was a single flower, sharply in focus, against a blurred green and a deep-blue sky.

The picture hovered before her eyes for a long time while the music hummed in harmony.

Then it was over, and Miri went home.

Frenchy was still out. Miri debated with herself, sensing anxiety. Then, to keep her hands busy, she resumed work on a micromosaic, eyes framed by the rubber of her microscope, hands busy with wires thinner than hair. She worked for a while, absorbed by the task.

Nevertheless, her feelings of unease grew. At last she rose and stepped into her meditation nook, eager to rid herself of the odd depression.

Against the wall hung Madonna's shrine. It featured the Cosmic Lady on an oval micromosaic of the finest quality. The rays of the sun formed her hair. The planets were her jewelry. She stood wrapped in star-spangled night. Next to her, on either side, hung other, small pictures—trees, shrubs, animals. Suspended from the ceiling on fine wire and turning slowly with the movement of air in the room were tiny yellow birds, their wings extended.

Miri pushed a switch on the floor next to the prayer rug.

A low multi-tonal hum began to fill the room. It was electronic music, a slowly shifting harmonium piece whose sound resembled the sonorous chant of men.

She meditated on maternity. The act of love unrolled before her eyes. Liquids oozed in palpitating mucous membrane. A sperm, one of thousands, squirmed and struggled toward the giant egg. The Female roundness waited for the tiny Male. They met. He clung to her like a particle of dust to an orange, but then he penetrated through the sheathing and life had been conceived again.

Miri was pregnant and carrying child. She imagined the ceremonies in the coven when she'd announce her pregnancy, but this portion of the vision refused to crystallize. Instead she saw herself struggle in a fierce, hot, dust-laden wind.

Miri opened her eyes and tried again. But once more there was

wind and other people obscurely visible through the dust. Someone walked beside her, holding her hand.

She opened her eyes, frightened.

Something interfered with her meditation, a worry or an intuition. Frenchy was in trouble and she knew it.

She uncoiled from her cross-legged position, rose, and walked out of the room leaving the deep hum behind her.

She passed through her work room where the implements of her art were laid out on tables and through there to a small but comfortable living room drenched in the orange blaze of artison.

She went out through the front door of the cubohome, took the elevator down, nodded to the dozing guard, crossed the lobby, and walked out into the brightly lit street through a revolving door.

Frenchy's work demanded odd, long hours. As a rule she didn't worry about him. So why tonight? Why did she feel that something was wrong?

She made for central shaft eyeing the airspace above the belt; she sought signs of Frenchy's red-white tube.

No one about. Past midnight. A strong current of air blew over Outer Ring. They renewed the air at night and it smelled fresh and salty. Ocean spray entered the ventillation intakes down below. The colorful banners of competing apartments waved and beckoned in the air: Hyatt House, Union Manor, Galsworthy Square, Denver Acres. Through glass portals she could see ornate lobbies and sleepy staffs

lounging in chairs.

Going out to meet him like this made no sense at all, but Miri had to do something. She couldn't stay in the cubohome any longer.

She searched the empty airspace below the brilliant overhead lights arranged in random, artistic patterns.

She was so intent on the heights that she missed him. His call made her look down. Then she saw him. He seemed to limp slightly as he approached on the movebelt. His robe was gone, his face blackened by soot, his long hair in disarray. She broke into a run to meet him.

"Oh, Frenchy," she cried when they collided. "What happened?"

He said: "Nothing. Nothing, girl. But you—what're you doing on the belts? Don't you know how dangerous it is?"

III

THE OPENING BALL

The ballroom slowly filled with people. They stood on the dance floor talking and drinking. They sat on a kind of peripheral balcony supported by pink marble columns. Young men and women moved about in separate groups to see and be seen.

The grandiose sweep of the place, the flash of lights from chandeliers and jewelry, the shimmer of robes and gowns, shadowy movements in endless mirrors against the wall below the balcony, the bubble in the wine he drank—all this made Bono's head spin.

Something in his stomach laughed.

Forteen harmonious tones rose side by side from an electronic organ on a platform to Bono's left. Crystalline water-spurts from a fountain to his right pulsed in rhythm with the music.

He put his glass on a passing tray, snatched a full one.

He turned to Dart. "Wild, isn't it? Oh, wild," he said with an arching eye.

He ogled a group of passing girls. The curvature of rumps and breasts shone pink beneath oddly textured gowns that seemed to let the eye penetrate and then again not.

Dark almond eyes glanced with provocation at the group in whose midst Bono stood—tribesmen in simple leather clothing that looked drab amidst the fire of diamonds and the sheen of silk.

He took a large swallow from the glass. Droplets of wine clung to his mustaches.

He throbbed with happiness. The pressure had fled. Morning had brought relief. Amidst the foul stink of the gel, in the reddish darkness of the bathroom, Bono had awakened to his old self. He'd scraped the stuff from trunk and limb, he'd shaken it from his hand. Already then a giddy joy had possessed him. No, it wasn't just the bubbly wine nor the shine of glass, silk, silver, and waxed wood. Life beat again inside his skin. He was back among the living again, out of the realm of painful dreams.

He slapped Dart on the back with a hand a little out of control, hard enough to make the wrinkled oldster spill a drop of wine he hadn't touched.

Bono cried: "Come on, Franco! Cheer up, old man. Why that dark look on your puss. Tonight we see how structure Bigs live."

Dart said nothing.

He meant to tell Mycal to curb his guzzling. His foolish, grinning face drew the snickering attention of the Bigs. His bucolic manner clashed with the sophisticated setting. Crestmore urged moderation—and modest shame in the presence of lascivious display.

Dart said none of this, gloomily aware that he'd made a hash of things. He followed Barney with his eyes. The ambassador mingled with Bigs. Dart hoped that Barney would stay away from Bono. What if those two had a heart-to-heart talk?

Maybe I should confess it all, he thought, but then he shrank back from the notion, repelled by the reckless madness in Bono's eyes. Quite clearly the chief was out of control on this first day of his Adjustment. He was a five-percenter, and God only knew what such a man would do.

Across the room Proctor, who had been searching for French, found him on the edge of the ballroom with Miri. The two watched the crowd near a pink column.

"There you are, Rivera," Proctor rumbled. "Hello, Miri." He took her hand. "It's been some time since I've seen you."

He eyed her opaque, long-sleeved gown, the fringed white stole across her shoulders, and noted that she did not display herself—but despite the chaste costume she was seductively full. But her femininity didn't reassure Proctor. He always experienced a kind of discomfort in her

presence. She resembled a proud, black bird with that dark hair, beaked nose, and flashing eyes. A single golden ring suspended from her left earlobe reminded him that she was a witch of some sort, member of some obscure cult.

He released her firm, warm hand, still vaguely troubled.

"You don't mind if I steal your husband for a second, do you? We have a small crisis on our hands." He smiled momentarily.

Miri said: "Not at all, Reston. And thank you for getting me the invitation."

She analyzed the feelings conveyed by Proctor's hand. He gave her a sense of concentration, ambition, vulgarity, and repressed resentment. She had a vision of a small, fat boy, the butt of jokes. . . and the words 'raisin-balls' echoed in her mind. Had that been a nickname of his? It seemed incongruous in a man who lived in a world of abstractions, his vital energies chained to the power lust. At the moment Proctor was also fearful of something—and yet he seethed with suppressed anger. At Frenchy? At something else?

She looked after the stout, short, blading Proctor as he led her husband a few steps away. How little of his power the man revealed in his externals, she reflected. Despite the blue robe and the ceremonial white sash that ran from his shoulder to his waist, Proctor looked common—a small bureaucrat.

Proctor stopped with his hand on French's sleeve. His mind lingered on Miri, who was one of the Schulheitzins, he now recalled, very high, Very Big, a family prominent

in the arts but inconsequential in politics. Miri had made an odd match, marrying a slum kid, probably the expression of artistic eccentricity. She was a practicing micromosaiker.

Proctor released French's robe and brought his mind back to the unpleasant business.

"I've had a call from Blottingham."

French affected surprise. "Blottingham on Unsler's staff?" he asked, thinking: *As if the world were simply filled with Blottinghams! There's only one that matters.*

"Yes," Proctor said. "But he said he was calling in his private capacity."

"Meaning?"

"Meaning he was speaking for Sidney."

French raised his eyebrows. He hoped that the blood pounding in his neck was not visible.

"It seems someone from BTA killed one of Sidney's flames last night," Proctor said, eyes sharp. "In a gun fight. Have you picked up something on that?"

"No," French said tonelessly. "What else did he say?"

"He gave me a few not-so-veiled threats. Fact is Blottingham was furious, and if he weren't a bit afraid of me. . . . Anyway, they want the man handed over, no questions asked."

"What did *you* say?" French asked.

Proctor snorted. "The obvious. I told them I'd find the man and hand him over."

French was taken aback. "You mean it?"

"Don't be absurd," Proctor said with deep scorn in his voice. "I protect my own. But we've got to gain time. Whoever did it shouldn't have left witnesses. We can't afford open war with Sidney now." His eyes spoke about the Secret Agenda.

French nodded. *There's no help for it*, he thought. His eyes were on the clump of tribesmen and he noted absently that Bono seemed quite another man from the reserved and hostile Activist French had received a week ago. Bono was bent double with laughter, he slapped his knee in mirth, spilling wine. *There's no help for it. I have to tell him.*

He took a deep breath and braced for the explosion. "Res, the BTA man who did the killing was—me."

Miri grew restless as the conversation between Frenchy and Proctor went on and on. The nobility had begun to clear the dancefloor. People took up positions along the edges of the shiny, waxed floor. Eyes looked expectantly toward a double portal.

Miri watched Frenchy's red face and hang-dog expression while Proctor spoke angrily with vehemence, chopping gestures of his fat hands.

A group of men passed by behind Miri. They stopped and drew her attention by a murmured conversation, their heads bunched in a knot. From time to time they glanced toward Proctor and French. Then one of them drew away from the group and came toward her, a young man with an olive complexion, glistening hair.

"Excuse me, Miss," he said. His

half-smile was unpleasant somehow. "Would you happen to know who that man is?" He inclined his head toward Proctor.

It surprised her that anyone might have to ask. She said: "Of course. That's Reston Proctor, the Chief Negotiator."

The man shook his head. "No, no," he said. "The other one, the blond one. I think I recognize him from a recent encounter." At the words his lips curled oddly.

"Why, that's my husband, Rivera French."

His eyes bored into her, noticing her for the first time. He nodded. "Thank you," he said, nodded again. Then he rejoined his group and, arms extended, he pushed his companions on their way. None looked back at Frenchy.

Miri couldn't escape a faint shudder, but she couldn't attribute the feeling to anything in particular and assumed that she had experienced the man's aura mingling with her own. Whoever the man was, inside he was a bundle of contradictions.

Miri shrugged off the feeling and turned her attention to the double portals, sensing a sudden hush. In a second the electronic organ opened with a jangled version of the Grand Harmony, music calculated to grip the emotions as it rose, fell, rose, and built up to the grand finale. It brought tears to the eyes, but Miri resisted the emotion. She had learned to scorn this crude, visceral adoration of the Male's organized power.

When the Grand Harmony was done, the organ took up a slow march, the portals opened, and she

saw the Unifier in his golden robe, a thick black belt around his middle. Behind him came the members of the family.

She noticed that Proctor had been caught by surprise. He disengaged himself from Frenchy and, as the Unifier slowly walked toward the Ecofreak delegation, he weaved his way rapidly in the same direction beneath the balcony. He had a part in the ceremonies.

Frenchy came back to her side with that look on his face.

"It's all right," she whispered. She sought his hand and squeezed encouragement. Then she turned her head back to the ballroom.

Behind the Unifier marched Regina, and behind her, three abreast, came the rest of the family.

Like her father, Regina moved slowly, one hesitating step after another hesitating step, in rhythm with the slow processional. She looked straight ahead with brief glances to the side, noticing people she knew, nodding to them faintly.

She noted with pleasure that all eyes were on her.

Her red hair was piled high on her head, revealing the swan-like sweep of a delicate neck. The hairdo was called Medusa—hundreds of ringlets seemingly random but actually arranged with computerized precision. Emerald teardrops swung from her ears. Her sheer-robe with the coiling snakes, all oriented suggestively toward her middle, glistened in the light of chandeliers. Tiny bells tinkled on her neck. Volcano burned in her blood and surrounded her with a nimbus of seductive scent.

She glanced to the side again,

and her eyes encountered Clafto. He stood a little back, half in shadow, surrounded by several of his sparks. She saw anger in his eyes and felt a pulse of fear. So far she had kept Clafto at bay, but obviously Clafto still hoped.

She broke her gaze and looked ahead again with a defiant lift of her chin. Clafto would have to resign himself to his fate—yes, even if Sidney pressed and pressed and pressed. She wouldn't be his tool not any more.

She dismissed both of them from mind and thought about the archangel with a cool sort of thought, a tiny smile in her mind. She couldn't see the tribesman. Her father's golden form blocked her view. If Sidney weren't nursing a broken leg, he'd be beside her now, and then she could look past her father, but she'd rather have her view blocked, of course, than have that beast near her.

She imagined the curtsy she would give Mycal, the look she'd have on her face—a trace of a smile, a tinge of a pout in the lips, a boldness in the eyes followed by a drop of lashes. She had practiced the look in the mirror.

The plan swam before her mental consideration. It pleased her that Serenita had blessed it—although it was just a wee bit devious. But Regina didn't care. Her energies flowed and raced, stimulated by a little drug mixed just for her ladyship by her physician.

This time I shall achieve it, she thought with determination.

French watched her from the sideline with a brooding look. Proctor's last words still rang in his

ears: "Never, *never* disobey me again!"

I should have done as he'd ordered, French thought. A part of his mind noted that Regina looked fit to kill—a veritable if slightly vulgar goddess. She was ravishing and knew it. *If I'd have had some staff with me*, another part of him brooded, *all this wouldn't have happened*.

I should have stayed behind that drum and killed them all.

Half measures, he thought. *Half measures*. Now we're in the soup.

He felt Miri's eyes on him and turned. She smiled and winked.

French felt a sudden rush of affection, put an arm around her waist, and pulled her close. So long as he had Miri. . . . Her body heat penetrated through the silk. She was soft to the touch and yet he could feel her strength. Nothing daunted Miri. She could have been a Branco chick—a fierce, passionate smuggler's fem. He tweaked her hip, eyes on the scene.

The Unifier had stopped before the delegation. An attendant noble disengaged himself from the entourage and carried the ornate key to Ricardo forward. He knelt down and held the pillow high so that the Unifier could take the key with his left. Then Bono stepped forward. The two men shook hands and the key was presented.

Ceremony, French thought. *Ornate Gestures of good will*. *Meanwhile we're just waiting to knife one another*.

His mind went back to the long, arid session with the sil-chemists that morning. They had explored every conceivable possibility, but

ultimately they hadn't been able to resolve the central question: Why would anyone want to weld silcoplast to *anything*? It could be done with copper, aluminum, and plastosteel. Simple: all you needed was a clean room, a molecular welder, and tightly controlled conditions—dust and random electrostatic fields had to be absent. Virtually every structure had the necessary facilities. But why do it? Such combinations had no possible use in any kind of communications system.

At the center of action, Barney and Proctor had now joined the group and toasted each other with glasses from a tray held by a brightly clad servant. Behind the group Regina and the family waited patiently.

The Unsler clan always amazed French by its size—all those brothers, uncles, aunts, cousins, nephews. They all had a kind of dull sameness, the same long face, pouched eyes, drooping nose.

Only two people stood out. One was Regina—a beauty. The other was Harvanth, a fat, ruddy man. He had married one of the Unifier's four sisters and had brought into the Unsler clan a blustering kind of energy. They had put him in charge of Defense, an unimportant job that even a stupid man could do.

The toast done, Unsler turned to introduce his family, and Regina advanced toward Bono. French watched with interest, wondering how the strict constructionist would react to the girl.

Bono blushed when she came forward, her hands lightly grasping her long gown. She bent down be-

fore him in a curtsy so low he glimpsed the movement of unsupported breasts. His blush grew darker. Blue eyes locked into his. Then her lashes dropped and she withdrew. Bono felt an involuntary twinge in his bowels and caught himself staring at her center with stupefied intensity. Someone else had come forward and pronounced a name, but Bono barely heard it.

He'd—he'd *never* seen anything quite so... it was really quite obscene, but it hypnotized him! He had to resist looking at her again, at all those undulating snakes. They pointed to a spot in her center that now shimmered darker, and now not.

Faces and names flashed by him. He shook hands and bowed absently, while his mind touched fugitive memories of short, guilt-laden sexual encounters. He knew very little about women, really, it came to him now. Strict constructionist training discouraged experimentation. Chastity was the word—at least until you formed a harem. Bono had trespassed on that command, of course. Drunk on fiery Wellhead whiskey, he had stumbled into the dark shacks on the other side of the refinery where the mutants lived. But those experiences had never been altogether pleasant in retrospect. You couldn't call him an innocent, not really, still... Bono had never seen such a display before. She was a princess, after all, he noted with inward shock. The Unifier's only daughter...

The last of the family came and withdrew, and now the organ struck up a slow number, all fourteen notes jangling. Bono looked about

at the vast glimmer and shine. Wellhead was very far away. The ballroom lay in a hush. No one moved. People stood on the edge of the empty dancefloor. Unsler's family had arrounded itself on both sides of a throne before the fountain. Only Regina stood a little apart, alone. Her lashes were down.

Dart whispered fiercely from behind: "Dance. You're supposed to ask her to dance."

Now he remembered. Dart had described the whole procedure in the afternoon. The dance.

He walked toward her, rigidly averting his eyes from the snakes. He looked at her neck instead, at a narrow red band around her neck, at little silver bells. He bowed. Again she curtsied, in response, and her nipples flashed.

Then he held her and they swung out on the floor.

THE BIRTH OF HAIRY-SCARY

For some time now Proctor had conferred surreptitiously with members of the Group. He had just spoken with Justin Todd, an old friend in the Ministry of Engineering, on whom he could rely to help hide the Interdiction. Todd's people, jointly with Proctor's, supervised Helium delivery. And then Hondo Weinberger had also been by, his hair grey and unruly. Hondo was the architect of the surreptitious Media campaign.

Proctor obtained perverse pleasure from meeting the group here, in Top Level, but enough was enough.

Roger Belmonte came toward him, the black commander of

Ricardo's police and garrison. With a slight shake of his head, Proctor told the soldier from a distance that a meeting was inappropriate.

Belmonte changed course. The red-gold jacket suspended from a button on his shoulder swung at the turn. Soon only the feather on the man's triangular hat showed above the crowd.

Proctor looked around for French, eager to chew on someone. The evening had been a sinister replay of 1051 when Tack had chased the same seductive bitch with such disturbing consequences. Could all the intelligence forecasts be wrong? Proctor wondered.

For a single, frightened moment Proctor imagined a scheme whereby Ecofreak arranged a charade to let BTA's intelligence forces think that Activists had won. Once that notion was firmly set, they would swoop in for the kill, bypassing BTA in a bold bid for Regina, intermarriage, the whole lot. The thought made Proctor tremble. Under those conditions, there would be no Interdiction, no Secret Agenda.

French! Goddamned, where was that man? He'd blundered last night, gunning down a man. Had he also blundered in his estimates?

Proctor searched the crowd.

Then at last he saw them. White-robed men had blocked his view, but now he picked out French and Miri just as they joined the dance. They turned around and around. Miri's fringed stole flew through the air and light glanced off her single golden earring. Proctor watched French lead the girl across the ballroom, corner to corner. He lost the couple for a second; then he

picked them up again, somewhat closer this time.

A strained expression on French's face caused Proctor to glance back toward the spot where French and Miri had started. That group of men who'd blocked his view. . . had they been flames?

His searching look fell on Clafto Meyer flanked by three husky young men. They wove their way through dancers on the floor clearly in pursuit of French but at a sedate, leisurely pace.

Proctor comprehended the situation in a flash and experienced concern for French. BTA had no power in Top Level, while Sidney's flames came and went here every day. On second thought, French was no fool—a hardy man, a veteran of Hinterland. He had brains, good instincts. . . .

Proctor glanced back to his left and saw the couple again just as French broke off the dance and, pulling Miri under the balcony, raced for an exit. He nearly collided with a tray-bearing servant.

From the other direction, Clafto and his followers came in hot pursuit, running now. They pushed rudely through the dancers toward the exit.

Suddenly Proctor exploded in anger. It boiled up in him hot and steaming. He'd felt the fury ever since Blottingham's tellcal, ever since that pear-shaped wonder had threatened him. Damnation, he had watched the bloody arrogance of this noble brotherhood too goddamned long, thank you. They could ravage the helpless masses of Ricardo all they liked, but BTA was a far cry from helpless. BTA was Proctor.

Deep down Proctor sensed a memory, but its content was out of focus.

A counter-thrust, he thought, casting caution to the wind. Goddamned, I'll mount a counter-thrust.

Turning cool, icy as rapidly as he had flared, he thought about the matter with shrewd calculation.

Sidney's flames came from Very Big families. BTA couldn't kill such men without danger of severe retaliation. But if the counter-thrust was to have its desired effect, it had to be something. . .shocking, jolting, memorable.

Proctor turned this and that around in his mind. Then he had an idea and began to elaborate on it. As he did so a smile faintly lit his features. The idea was neither very practical nor very rational. . .but he found it irresistible for that very reason. Nobody would believe the flames, and therefore it might just work.

He gave it a name: *Operation Hairy-Scary!*

He snapped his concentration and began to look about. He had to have a talk with Belmonte after all. Tomorrow night, when BTA swarmed over the Acropolis to pick up flames, the police had to be conveniently blind.

INVITATION

As they had danced through the hours, Bono had fallen ever more deeply into a trance in which nothing seemed to matter but her scent, her feel, her warmth. He moved with the tide, aware that he

was drunk with stimulation and false hopes.

He thought: *The girl's crazy about you. There is no other explanation. She has refused all others, and her eyes shine with a kind of admiration.*

Seconds later he took it all back. *She isn't really in love with you. It's just this damn Adjustment thing. You're making it all up.*

Shame possessed him, and he blushed recalling the stupid conversations between dances. They had nothing in common. "You are a

"You are a rancher, Mr. Bono?" . . . "Yes, ma'm." . . . "Where is your land?" . . . "In the Merilo district, on the Plain of Baez."

"You dance divinely."

"Ma'm, I—" He'd stood beside her like a tongue-tied clod. Choked up, plain and simple. A chasm yawned between them. Yet. . . Yet she clung to him for dear life. He could not be imagining it all. Her eyes sparkled in such an odd way. . . .

Now they danced near one of the exits from the ballroom. She had more or less guided him toward it, and now she stopped.

"Come," she said, and she pulled him through.

The heavy door closed, shutting off the noise of people, the jangle of music. In the odd silence, in a hall lined on both sides by mirrors and lit by lamps fashioned in the shape of candles, her eyes gazed into his, and then he found her in his arms. Her lips sought his in a hungry, almost angry kiss. After a moment she disengaged her mouth with a wrenching sigh, as if it

Newport

*Alive with
pleasure!*



18 mg. "tar", 1.2 mg. nicotine av. per cigarette. FTC Report Oct. '74.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.



If you have
a taste for quality,
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That Cigarette Smoking Is Dangerous to Your Health.

Kings: 16 mg. "tar," 1.0 mg. nicotine; 100's: 16 mg. "tar,"
1.2 mg. nicotine av. per cigarette, FTC Report Oct. 74.

caused her pain to do so. His legs trembled with weakness. Bright, languid, yet teasing eyes looked into his. He bent to kiss her again, but she turned her head aside and shook it slightly.

"When?" he asked in a voice almost harsh with emotion.

"Tonight," he husked. Where?"

She reached up and pulled his head down so that her lips could whisper in his ear.

"In my domain, you silly. Where else. Top Level West. The tower nearest to Hinterland." She managed to give that a romantic sound. Her breath tickled and heated his ear.

"But how?" He needn't have whispered. They were alone, observed only by mirrors on either side. "I don't know how to get about. I've been inside the embassy all week."

Once more she pulled his head down. Her teeth gingerly bit the lobe of his ear, causing him to tremble all over.

"Outside the main lobby—where you came in? Turn left and walk to the garage that faces Outer Ring. One of my people will bring you to me."

She let go of him and drew back.

He took a step toward her, but she shook her head again.

"Later," she whispered. She puckered up her lips in the semblance of a kiss. Then she walked away from him, hand extended, reflected in mirrors.

When she had disappeared, Bono turned and walked back into the ballroom. For the first time in hours he became more aware of his surroundings and noticed that the

crowd had thinned, but in the middle of the dancefloor hardy holdouts still twirled round and round. He picked a path along the edge of the dancers, walking next to columns, unaware of the knowing looks that followed him. He mused in a kind of strung-out way, thinking that it was true after all. She *did* love him, by God. And that meant that he'd soon be violating a sacred law of the Crestmore doctrine, but the thought left him indifferent. He knew the verse—who didn't! "Thy seed shall not mingle with that of the whore." It was written. But he couldn't wait to pollute the pure tribal blood, he thought with an inward chuckle, didn't give a damn, was *delighted* to do it, in fact. He picked up the pace, making for the lobby.

Suddenly small, wrinkled Dart stepped out from behind a column and blocked his path.

Bono frowned.

"There you are, Mycal," Dart said, eyes searching and disapproving all at once. He side-stepped and continued beside Bono. "Ready to go home, call it a night?"

"I have other business," Bono answered curtly. "You go on alone."

"Mycal!" Dart grabbed him by his sleeve and stopped his eager forward rush, raising within Bono a sudden fury.

"What is it!" Bono grunted.

"If there is one thing I have," Dart said dramatically, "it's the courage to oppose. I oppose your whoring after structure flesh!"

"Hold your tongue!" Bono hissed, glancing about furtively. His face had gone red, more from anger

than embarrassment. "I have business. I am *not* whoring after anything." He tried to pull free, but the wrinkled claw held on to his sleeve tenaciously.

Dart said: "The talks start at nine tomorrow. It's nearly one in the morning. You must be rested and sharp. You can't risk the future of the tribe."

"Let *me* worry about that," Bono spat back under his breath. He jerked his arm loose. "What I do is none of your business, Dart. Remember that!"

He gave Dart an angry stare, turned, and walked away.

PURSUED

French pushed through a swinging door and pulled Miri behind him. Cooks in white tunics looked up in surprise. French swept the gleaming kitchen with a glance. His eyes came to rest on a heavyset butcher. In front of the man, stuck point down in a wooden block, he saw a big, sharp knife.

He glanced at Miri and noted that her uncomprehending surprise of a moment ago had yielded to cool awareness. He let go of her hand, whispered: "Keep with me, no matter what." She nodded as he moved forward.

French stopped before the butcher, eyes on the knife for a second. "Which way is out?" he asked, looking up. The butcher stared back with an open mouth, clearly a very stupid man. "The *back* way!" French added, feeling strong tension. Precious seconds fled. Then he saw the exit, half

obscured by large pots hung on the wall. French grabbed the knife as he passed the butcher. It would replace the pistol he had left at home—you didn't go to Top Level social events armed.

Past pots and pans he ran out, Miri breathing behind him. The stunned butcher yelled: "Hey! Heey, you!" The door cut off his voice.

Senses sharpened by danger, French looked about with a flashing eye. Now they were in a narrow room. On the right a row of women stacked plates into a battery of dishwashers. Ultrasonic cavitators hummed. The women didn't notice them. He ran forward, pressed into motion by the certainty of pursuit.

Near the opposing door stood a wheeled cart loaded with stacks of dirty porcelain—precious, skin-thin stuff from Narodnik. He drew up short before the cart and gave it a shove. It sailed down the way they'd come, its tiny swivelled wheels wobbling. The butcher opened the door just in time to collide with it. French heard the crash of breaking skidding china as he pushed Miri ahead and out.

They ran through a maze of corridors seeking the exit toward the garage—but found only toilets, broom closets, pantries. French felt fatalistic about this crazy chase. Clafto's face back in the ballroom, when, for a second, he had confronted French, had been too damned cocksure. Flames would be blocking all the exits.

French kicked himself for his carelessness and softness. He shouldn't have allowed Miri to come, should have anticipated this,

shouldn't have let her talk him into it. Would he ever learn to say no to Miri?

He raced ahead. Miri's silk swished behind him. Now was the time for some of her magic, he thought wryly. They needed a spell that would transport them to their cubohome. *Never mind*, he added, I'll bet Clafto has the place staked out.

On one of the turns they suddenly saw flames coming toward them and turned in the other direction, running for a door up ahead. They ran to the door, went through. On the other side, French found and activated a lock. *Thank God for little favors!* They had a second or two for deliberation.

The room was dark. It took him a moment to see what it was. An empty dormitory! Beds were stacked five high to the ceiling, but clearly the place wasn't used at present, the mattresses, seen in the dim red light above the door, were bare. An idea came to him and he decided to take a chance.

He pulled Miri between a set of bunks. "Quickly. Get down," he hissed. "Crawl under the bed." She complied and he lay down beside her. "Don't move. Don't breathe."

She settled down. For a second her gown rustled. Then all was still.

Soon flames bounced against the door, tore at its handle, kicked the metal. This was followed by the silence of their consultations on the other side, and then by the dull reports against the metal of a heavy shoulder backed by body weight.

The lock snapped at last and a big man tumbled in, bringing a flood

of light and, immediately behind him, a group of flames. Clafto yelled: "Up ahead, through there." Boots ran along the aisle of the empty dormitory. A door slammed. It was still. The gamble had paid off.

"Come," French whispered.

He ran to the door where Clafto's herd had just departed, locked it. Then he led the way back. On the opposite end of the long corridor was another door just like the one Clafto's men had broken down. Another dormitory? One for women, one for men? Another lock?

His guess turned out to be right. They plunged into darkness. Once more he saw a red light at the end of a bunk-lined aisle. He locked the door and moved forward.

He stopped below the night light on the other end, glanced at Miri, saw tension in her face.

"Are you all right?" he whispered.

Miri nodded. She was tense but confident. She'd never seen this side of Frenchy before—his concentrated instinct and power. The knife in his hand glowed red in the light above the exit. Tiny bits of meat and fat caught in the serrations of the blade brought to mind that Top Level ate imported food, not hydroponic substitutes.

French turned to the door, grasped the handle firmly, and slowly opened it. Light drew a narrow line down his face. He saw a wall. He opened the door wider.

There he was!

A heavysset young flame leaned against the wall out there, a pistol

suspended from his slack hand. He was evidently bored by his guard duty. French saw him yawn, saw him scratch his head.

Very, very slowly, French closed the door.

"Wait here," he whispered to Miri

He gripped the knife, the door knob. Five steps should get him to the flame and surprise would work for him. His throat was tight with excitement.

One last glance at Miri's tense face, then he leapt out of the darkness into the light.

His sudden, flashing attack totally overwhelmed the flame. The man didn't even have time to raise his weapon. His big, florid face turned slowly. Large, watery eyes stared. Then French drove the knife into the man, stabbing up through guts toward the lungs. The moist eyes, wide-open in innocent surprise, slid past French as the figure sank slowly to the floor. Blood appeared at the man's mouth, nose.

French took possession of the pistol. Three quick steps carried him to the dormitory door. He reached in for Miri and pulled her out.

She stopped and stared at the dead man from whose mouth a stream of blood had begun to flow down. The eyes were still open, still innocent but glazing. A wound in his center had begun to ooze.

She took it all in with cool objectivity. Recycled. Back to the womb of the Cosmic lady, she thought, and she reflected that he'd be re-born again and would start his interrupted journey over as a baby.

"Come on," French said, his voice edgy. He had glimpsed a door

down the hall with the word 'Garage' painted in black letters on its grey surface.

In the garage itself, dark at the point where they had entered, light up ahead where through arches French could see the upper portions of Outer Ring, he led the way toward a clump of jump tubes parked closely together.

"Get in one of these," he told her. "Quickly. Get down so you can't be seen. I'll look around a little."

He waited until she had disappeared in what turned out to be one of the tubes of the tribal delegation. All the tubes in this cluster bore the circular Ecology symbol on the door, and French was reminded that the ancient greek letter symbolized death.

He hoped it wasn't an omen.

They were on the third or fourth floor of the parking lot, a simple arrangement with open sides. Thick, rectangular columns supported the roof.

In the shadow of the columns, he ran to a spot from which he could oversee the down-shaft. He recoiled when he saw motion. Peering out more slowly, he recognized Bono and another man descending in jump tubes marked by the Unsler flower.

Sooooo! French thought. *Will my troubles never end? My noble strict constructionist already pants after the only fem he should avoid like the plague. Proctor will—Proctor will have a heart attack!*

He went toward the street side and saw what he had hoped he wouldn't see—flames spaced at regular intervals on the sidewalk

below. That way was blocked too. Now what?

ARMOR

Regina ran out of the shower, still drying herself, to see if Selma had laid out the costume. She wanted to be ready and in position by the time the archangel arrived.

Yes, the girl had done her work.

The ruffled blouse and leather shorts with suspenders lay on the end of the large, canopied bed under the supervision of four large teddy-bears lounging against the pillows. White kneesocks with tiny red pom-poms on top—also ready. On the floor waited red leather shoes with thick, high heels.

Regina smiled, pleased with the display. Shorts, suspenders, especially the crossbar on the suspenders made of carved bone—all this would combine in a signal. A tribal touch, but not excessively tribal. The leather conveyed a hint of armor, of inaccessibility. Yet the shorts were very short and would give full play to her thighs—a touch of the necessary enticement to cap the matter off.

As if the poor boy needed any more enticement!

She slipped into panties and pulled them over her flat belly, across the shadow of her navel.

Should she wear a bra? Decidedly. Absolutely. She squeezed several in a row, standing before a cabinet with its drawer open, and picked the stiffest and most opaque one she could find.

More armor.

In a way she felt sorry for the arch-

angel. He was a very nice boy. She had found him clumsy and innocent. As for dancing, he hadn't the faintest. Most clubfooted, clumsy. Not like her Jonny at all. She could *like* him, she decided. She might even learn to love him, although now it was all pretence.

Her arms behind her back, she pressed the fabric together and the fibers locked.

She put on and buttoned her ruffled blouse and slipped into the leather shorts. The horn buttons of the suspenders gave her a bit of trouble. They refused to go into the button holes.

Serenita had approved the plan and had called her a clever girl. The nun had come in the afternoon for consultation, and for once she hadn't worn her usual nunnish costume but a long, blue robe and a simple cloth around her head, a very tall woman and surprisingly erect for someone her age. In her left ear had been a golden ring, and that ring now puzzled Regina. She had seen the identical ring on a woman at the ball. . . or had she? Oh, never mind.

"He will understand when it's all over," Serenita had said, seated primly on the edge of a backless, hassock-like seat in the conversation pit. Her understanding had surprised Regina, for the proposal was a bit unethical. She meant to use Mycal, to make him into a tool of her own designs, and Serenita should have disapproved of that as contrary to the teaching of charity. But the nun had nodded. "Now you must do anything you can to escape that worthless brother of yours." How true. How true. "Afterwards, when

it's all over, you can explain everything to him. He will understand and forgive you—I'm sure of it."

Yes, Regina thought, he's a sweet boy.

She pulled on her socks and slipped into the shoes. Fully dressed now she walked to the tall mirror by the shower door to look at herself and found the image pleasing.

The hairdo, of course, would have to go.

Five minutes in that marvellous, computerized machine her hairdresser had devised—he said it was the only one in all of Union, designed exclusively for her ladyship—and she would have, in place of this randomly curled Medusa pile on her head, two girlish braids on either side with a red ribbon in each.

And then she'd go up into the garden and wait for him under the stars.

AGONY IN THE GARDEN

All around Top Level's lobby, Bono had seen pictures of Union's thirty-nine structures. Some were shown at night in a blaze of light, some in daytime against clear skies, yet others half shrouded in clouds.

The sight of so many structures had filled him with awe. The reality of Union's hundreds-some odd million people had impressed itself on his awareness.

That was one perspective on the subject.

Another was the inside view, what he had observed in the last fifteen minutes or so—the Acropolis at night—on in the day time, for

that matter. In structures there was no difference between the two.

Ricardo—a bright shining of glossy surfaces, deeply shadowed recesses. Everywhere light had bounced off blueish drilla-glass panes, large and small, convex and concave—like the eyes of an insect magnified a thousand-fold. Ramps, railing, flights of stairs cascading down or towering up. Squares, alcoves, fountains, mechanical birds twirping in artificial trees. Gigantic micromosaics blinking from tiny particles as he passed. The slithering, reddish, scaled surface of movebelts. Colorful clusters of flashing signs in empty shopping arcades. The breathtaking drop down Central's shaft, passing level after level in a succession of bright-dark-bright all the way down to the mixing bowl. And now this sweeping vista that stretched before him—West Tower's broken lights seen through the translucent roof of the hose-like intertower beltway.

She lived up there.

She lived up there. She lived in this city. Yet another perspective on the subject.

Ricardo, fruit of a tree. Regina, sweet meat of the fruit.

Bono explored the image. A map of the Helium pipeline in that Top Level lobby had suggested it. The pipeline resembled a gigantic red tree overlaid against the American subcontinent. Its trunk ran south and north. Its branches reached from coast to coast. At the end of each branch hung a structure. The roots of the tree reached deep within Texahoma and sucked Helium from five red pools, all of them near Wellhead, where the gas-

fields had been discovered three hundred years ago—a new formation since the wars, perhaps caused by the wars, gas fields whose methane was rich with Helium.

The gas came from the ground and went through refineries. Cryo-expanders stripped off the methane leaving the Helium. It travelled through slender pipes up the trunk of the tree. Once he had put his hand around it. His fingers had almost touched his thumb. And yet that small artery sufficed to raise these magnificent constructions.

His admiration for the structures was excessive, of course. Regina colored his thoughts. Wherever she was, there was magnificence.

The poisonous fruit of the Helium tree held a sweet kernel that he would taste. How could he reject the structures?

He wanted to *get* there. "Show me how to drive one of these things," he said to the servant who travelled beside him. Bono pointed at his own jump tube, which the man operated by remote control.

Later he sat in a dark lobby of "her ladyship's domain," as the servant called it. He paced up and down, nervous like a caged beast. At last a thinnish young woman with large eyes appeared at the door. She had a face perpetually in an expression of astonishment.

"The mistress is waiting for you in the garden. Please follow me."

She led him through halls and rooms, a veritable warren of rooms, some small and cozy, some large and expansive, but all of them incredibly wealthy and beautiful—mirrors, tiny fountains, glass tables, cabinets, soft crumpled

couches, statuettes, glistening mobiles, tables and chairs, exquisite micromosaics. The lights were dim and he sensed in the shadows more rooms, more nooks, more mysteries. He heard a faint whispering of music.

He had a vague thought of paradise and underneath that a tremor of anxiety.

I'm not worthy. . . .

He couldn't believe any of this. The experience had a dreamlike unreal quality. He followed this girl through a . . . museum of wonders. He smelled perfume. Somewhere she waited. . . for him! It boggled his mind.

A devilish part of his brain reminded him that he had come to Ricardo to destroy it. He'd sat on his poly staring at the poisonous fruit and had imagined it crumbling, falling down.

Madness, foolishness!

He meant the Crestmore doctrine. Right now he couldn't understand what the fuss was all about. Perhaps Mycron Crestmore had had a point at one time. But now the mad antagonism between Structure and Hinterland made no sense at all. The two had lived side by side for centuries.

Heretical thoughts, chided his devilish self. *My, my, Mycal. How you can twist and turn the facts when you want to. . . when you want her!*

Bono shook his head in protest as he followed the girl over carpets of iridescent sheen, delicate tiles, polished parquette.

Nothing new, this doubting. He recalled his adolescence when he had stared at refineries, compressor

stations, copters, laboratories, rockets, cannon, temp-control devices . . . He had thought then that all these things were also Technology. He'd smiled inwardly when he'd been told that tribesmen only used Technology to defeat Technology. He had always wondered. Now, after all these years, the doubts had simply come to the fore again in the presence of structure life—which didn't seem so terrible after all.

I really had no concrete idea, he assured himself. No idea at all what it was like.

It was enchanting—the whisper of music, the strands of faint scent floating in the air, the warble of water somewhere, the girl hiding somewhere here. . . .

Well, yes, dammit, the girl!

They don't know anything back home, he thought with sudden irritation.

The servant had stopped before a glass door. Through it Bono saw a stairway curving out of sight. His own image—boots, beaded leather clothing, dark, bearded face—was mirrored faintly in the glass.

"The mistress waits up there. Just go on up."

He pushed the door open and felt an inrush of humidity, smelled a garden.

Nodding to the servant, completely intent now on what lay ahead, he went through and up the stairs.

Halfway up he noticed open sky above glimpsed through a curving dome of glass faintly reflecting light, a deep blackness richly sprinkled with a wash of stars. He hadn't seen the sky in days. The Milky Way clouded across his vi-

sion overlaid by closer, brighter luminosities.

He went on around a spiral.

He stopped at the head of the stairs and saw a garden under a roof formed by numerous small domes. Telescopes stood in a row on his left. Lamps on two sides behind a profusion of plants bathed the roof in a faint light. A gravelled path stretched ahead. A fountain played at its termination. Olive trees, palms, tropical bushes, flowers in a riot of color filled the place, closely packed and lush, exuding a rich organic smell.

The garden must have cost a fortune to install, must cost a daily fortune to maintain. The whole place had to be completely shielded from gravitron—like mush tanks.

He sought her with his eyes and saw her at last half hiding in a small moon-shaped clearing off the path smiling from the depth of a large piece of canvas upheld by four steel stems that fanned out of a thick stone base. She had crossed her legs and her chin rested on two up-held fists.

She took his breath away. She had transformed herself from a sultry goddess into a sweet, lascivious child—braided hair, white ruffled blouse, and tiny shorts that gave full play to a pair of thighs the color of milk above the tan.

She smiled at him for a long, breathless moment. Then, with the grace of a kitten, she jumped up and ran toward him. She nearly leapt into his arms.

He kissed her with mad abandon. He crushed her to his breast. He groaned with an overload of emotion, a murky feeling of joy and

longing and breathless surprise.

For a long time they kissed, embraced, pulled back to look at each other. Then they went around again. Each time was more and more tumultuous, a rising symphony repeating a theme at octaved intervals. He grew frenetic with passion.

The tension mounted.

He kissed her, hugged her, and held her close because he didn't know how to go on. In those dark and filthy shacks in Wellhead, bored naked women had waited while he'd dropped his pants. This situation called for a ceremony of disrobing. But where to begin? She didn't help him. He had to make the first move.

Regina, for her part, began to weaken rapidly as their sustained endearments continued. She felt the warmth of passion rising slowly. He was so deliciously inept. She fought the urge to yield, to help him. *She* was aroused! *She*—who'd been subject to the most sophisticated methods of seduction used by men who fancied they knew a bit about the art of love. *That* she could handle. *This* was something much more dangerous for all its innocence. Very human, her bearded angel. A real passion throbbed in this artless, unskilled man—in more ways than one. She could feel his swollen organ pressed hard against her center. When Bono began clumsily to grop around her back for an opening—she felt the irritation of his hands as they encountered the rigid strappings of her suspenders—she nearly panicked into submission. But she pulled herself together. She *had* to follow her

plan, no matter how inconvenient. When he intensified his search with something approaching frenzy, she suddenly slipped out of his grasp and stepped back.

Her face was blank with desire, the red of her lips enlarged by kissing. She shook her head. Her eyes brimmed with affection.

"We musn't," she said. "Not *that*."

"What do you mean," he rasped, completely out of breath, chilled with irritation.

"Honey-sweet," she said, and she came back to him now but with her arms protectingly up front, hands curled into balls beneath her chin, "I can't strive with you, little darling, not yet."

"Why not?" he barked, his eyes in a terror. "Why? Why not?"

Bono had a terrible premonition that she would elude him. He felt a dark confusion. Everything about her told him she desired as much as he. The sensation of her own lust merely amplified his own.

"Oh, sweetheart," she whispered, "don't be so furious. I love you, truly! But I've been disappointed before."

At the moment, strangely, she *did* love him—or maybe it was just her hormones?

"I love you," he breathed, and he took her in his arms again, possessively, fiercely. But she blocked him from her softness and resisted his artless tugging.

Did he truly love her, she wondered. Or was he, like she, under the venal spell?

"I know, I know," she whispered. Whatever they now felt was real enough in its way to be a

substitute for love. "I know, Mycal. But I won't be hurt again. I need your true commitment."

"You have it," he said hastily. "Truly. I love you." Once more he began to seek an opening on her back.

She thought: *He still hasn't grasped that it can't be tonight, that I must have more. . . .*

She wished it didn't have to be so. She wanted to conceive, so much, so much. *Conceive?* It was a stray thought, and she put it aside. What she wanted, obviously, was to yield. She wanted to put her plan aside, take his hand, and lead him to her favorite room, her favorite divan where, across from the gold-laced mirrors, she could lie down and give him leave. But this time she was determined to win. Like crazy, menacing laughter, another world was there, in a corner of her mind—a future much like the past, a future which might become worse after Daddy died and Sidney became ruler of all.

My plan, she thought almost hysterically. *My plan.*

Slowly but firmly she pushed him back.

Bono saw her shake her head. "I must have more," she said.

"Name it," he cried. "I promise you! You'll have it." He was all fervor and conviction. He'd give her the Milky Way itself, rolled up in a canvas bag.

She looked at him with an expression so sweet, so filled with longing, he forgot the lust he felt, that subliminal rage which was ready to burst forth, that strange vacillation between hope and despair. Her look was questioning, timid.

"Do you really love me?"

"Truly, I do!" He made a step toward her, but she retreated.

"Then take me with you to Hinderland."

Bono felt a surge of joy. Was that all? Was that all her little heart desired? Nothing he longed to do more, nothing easier. He relaxed again. He would possess her yet. He could meet her price—and more: he wished desperately to pay it. To have her by his side was his own most fervent longing.

"Yes," he effused. I promise."

Once more he made an advance, thinking that now the bargaining was over. But then he saw with a wary eye that those words were not enough. She retreated further, all the way to the moon-shaped behind a lawnchair, put it between them.

"Darling," she said, "please don't be angry. I shouldn't have asked you to come. But *I so* wanted to see you again. We won't strive tonight. Please don't expect that. I won't do that until you've made your commitment."

Bono was devastated.

"But how?" he asked. His voice had the sound of suppressed tears. "What do you want me to do?"

She looked at him; she hesitated. Now she would learn the extent of his commitment. In this moment, she cared as much for his commitment as she did for what it would bring her—escape.

She took a deep breath.

"This round," she said, "I must be the Helium hostage. Only then will Daddy let me go. Ask for me, darling. And when I see it reported on the Media, I'll be yours."

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EFFICIENCY



GREG HARTMAN

*The purpose of diplomacy
is to further the careers
of diplomats!*

THE ANCIENT CASTLE that housed the Terran Embassy seemed one with the mountain it topped. Carved of the same muted stone, ponderous walls blotched with the same mustard-colored lichen, it merged imperceptibly into the living rock. The two figures which soared from it and flew east could have been eagles bursting from their acie.

They were birds of more subtle powers. Diplomats.

"There's the problem," Jana Blinton shrieked, gesturing to the verdant valley a klick below. Twisted shrubs dusted the steep sides in random outbursts, but the narrow flat bottom had been parcelled into neat rectilinear patches. Among them moved dark ants: Kronigian serfs tending their masters' crops.

With a cry of delight Civerie

Llan adjusted his belt and swooped down. Safe from prying eyes, Blinton treated herself to a grimace. The priests who ruled Kronig disliked humans spooking their people. If they saw a senior Embassy official like this idiot of a Naval Attache breaking the rules. . .

Of course, the way things were going they might all be kicked off Kronig by winter anyway.

Blinton checked her wrist chron. Two hours till the meeting with the Ambassador. She should be reinforcing her lobbying efforts with the other department heads. But then, a jaunt with Llan was lobbying too. He was an unknown factor, a man who'd been Naval Attache only since his predecessor's accident three weeks earlier. How would he vote when she presented her report and the assembled egos proceeded to clash?

Llan continued to disport himself below. Damnation. She jerked at her belt and shot off into the wind, letting the pelting molecules cleanse her face for the fight ahead. Strip off the loose skin, wind; only a bone-and-muscle Blinton dares attack the Ambassador's overwhelming inertia. Cumulonimbus boiled over the range ahead, promising a storm. She flew directly into the refreshing hi-oxy air, the air that, along with its strategic location, made Kronig so valuable as a potential R&R base for the sector.

And how simple the elements are, she thought, compared to the

Embassy infighting. The clouds loomed.

"Hey, slow down," buzzed the bone-phone behind her ear. Llan closed from behind, epaulets askew. One meaty hand reached for her thigh as he neared. She dodged. He had to settle for the forearm-forearm hold decreed by belt etiquette.

"The natives certainly seem industrious," he said, trying to make conversation after an awkward pause.

"They have to be. Low solar radiation, primitive farming techniques. Adds up to a lot of labor per unit of protein."

A rift in the stormfront revealed the dark growth of a castle on the range before them. "Veer left," Blinton said, turning Llan to fly parallel to it.

"Why?"

If you spent more time studying the planet and less time with your damn Navy intrigues. . . Blinton kept her face locked in the meek mask a civilian learned to wear around members of the military clans. "These people may be on the brink of starvation but that doesn't keep the priests from fighting to extend their parishes. That's why you see so many castles. Another product of war is suspicion. Paranoia. They worry about spies. If we want to be allowed to stay on the planet we don't want to look like snoops."

"They don't seem to mind Molots in their airspace. Look."

Out of the sky dropped a tiny

cruciform airship, abristle with pods and nacelles. It hovered above the fortress for a few seconds, blinked its lights, then settled out of sight inside the walls as the clouds closed in again.

"That's the third visit in as many days. Something must be done," Llan scowled.

Well said, commander. Blinton ignored the hand fondling her forearm—the man was already famous as a womanizer—as she reviewed the problem for the coming meeting.

Kronig: a planet with a medieval culture and equivalent technology. Under a cool sun members of the dominant theocracy compete for power, straining already slim resources.

Suddenly it became part of a galactic community, with two competing stellar civilizations eager to bring it into their respective sphere of influence. The priests hold back, unsure of which to trust.

As consul general and head of the original Terran legation, she'd been using Terran technological expertise to solve minor problems for the Kronigians while her staff traced out the workings of the society. It seemed to be paying off. But two months ago the legation had been upgraded to embassy status. The ambassador placed over her had brought with him a swarm of bureaucrats and other functionaries. She still didn't know the reasons behind the shift; frontier posts were

usually under rather than over-staffed. Probably a high-level power struggle between the Throne and the Navy. But whatever the reason, her efforts at winning the Kronigians' trust had been aborted by the new Ambassador and his cronies.

Today's move would be her big try to get things moving again. If everyone liked her report—

"Say, don't you think we ought to head back?" Llan tugged at her arm. The first long tendril of rain splattered over them. Blinton felt nothing inside her polymer coverall but the Naval Attache's dress uniform, so ludicrously unsuited for flying, was already half soaked. She remembered his pass and an impulse flared.

"What's the matter, commander?" she cooed. "Afraid of a little water?" She squeezed his arm lest he break away and with an alluring smile flew into the storm.

THUNDER jolted the conference room as she concluded her report and flowed back into her chair, tossing her red mane for effect. Lightning and more lightning etched evanescent half-tone images of the counselors scurrying to seal the embrasures against the storm. Blinton glanced at Llan, noting his still-damp curls. But he refused to meet her eyes. She bit her lip as she waited for reactions, hoping the soaking hadn't turned him completely against her. Could he take a joke? Damn all impulses!

"An interesting analysis of Kronigian economics." That was the Counselor for Xenological Affairs, a shabby rabbit. His opinion meant nothing in these circles, which was why he usually spoke first. "Balanced." Well, the Logistics Secretary was verbose today. What, no others? The heavies were holding back. Blinton scanned the table, but gazes flickered around her without intersecting. And their fingers: a ring of anemone tentacles in fitful drift. Bad signs. She braced herself.

The rasp of dry palms rescued her colleagues from uncertainty. The Naval Attache. He straightened up and spread his arms wide across the polished pseudo-wood, looming larger as more of his body came into view. "I thought the Consul General's report was very interesting," he said, head slowly rotating to bear on each of the others. "It's got some fine ideas. But overall"—his eyes locked on hers—"it's poorly thought out."

Blinton's social mask never flinched. "I think it's very straightforward. Eighty-nine percent of the Kronigian population are serfs engaged in primary agriculture, barely producing enough to prevent starvation. We could alleviate their miserable lot by introducing crop rotation, animal breeding techniques, awareness of subtle ecological interactions. Boosting crop yields would mean more food and also encourage long-range

trade with the surpluses, thereby breaking down some of Kronig's provincialism."

"Unemployment would also increase, since fewer serfs would be needed to feed the population," Llan needled. "Wouldn't that create crime and unrest?"

"I dealt with that in appendix F."

But I didn't want to stress it, damn you.

"I calculate the excess population would be displaced to the market towns. It would provide the labor for the crafts which would expand as trade increased and a money economy replaced barter.

There would be temporary dislocations, of course, but the gradual nature of the change—several generations at least—would mitigate the impact a great deal."

Llan leaned back in his chair, frowning. What was he up to? She hadn't expected opposition half this overt.

She sneaked a glance around the table; all were intent on the Naval Attache's dramatics. So much for her lobbying.

Llan raised his head. Blinton's stomach clenched.

"There are two major problems with the Consul General's plans," he stated. "First, it's not spectacular enough. She proposes sending a few score socio-agronomists out into the countryside to spread good farming techniques. Suppose the Molots countered with an offer of

self-propelled plows good for 50 years of service. Who would look better?"

"But that would make them dependent on an advanced technology, whereas my idea—"

Llan swept on. "Second, suppose the priests did accept our offer. Consider the social impact. Not just crime, but generations from now when the market towns become cities and flex their political muscles. Against the priests. How favorable toward the Terran Hegemon will they be when they realize we've set them up?"

Murmurs flowed about the table. Llan looked at the Ambassador and lifted his shoulders apologetically. "Of course, I'm just a simple military man," he said, reminding them of the power he served. "I don't want to monopolize the discussion."

He sat back as they grilled her, a half-smile drifting over his full lips. Blinton already knew how the vote would go if she forced the issue, so she fought to minimize her losses. On they ground for 80 minutes as each department and section rep dashed in to whack his coup stick against the proposal already half bludgeoned to death. Good little bureaucrats that they were, most worried about the long-range power shifts. She tried to explain that lessening the priests' grip on the planet needed to be done eventually, if only to stop their wars. But to no avail.

The Ambassador listened fitfully and doodled, probably thinking more about plans for his party. But at last he bestirred himself.

"Obviously Consul General Blinton's proposal needs more study. I suggest she prepare additional reports analyzing the questions raised. Analyzing them *in detail*." A wrist-flip dismissed the documents, some 400 pages thick, scattered about the table. You bastard, she nodded.

"And when she returns with the additional information—in several months, I should imagine—we can consider her proposal again. And if it has merit, we'll form a committee to study the matter further."

AS CONSUL GENERAL she was entitled to eat in the Executive Dining Room. But Blinton preferred cafeteria utility to ambassadorial ostentation: waiters, three forks per person, meals that dragged on for hours. She drifted through the lower ratings, nodding, looking for—ah ha. The Personnel Officer.

"Mind if I join you?" she asked, with a barely perceptible pause before dropping down. Jeremy smiled over his tray, eying her bare midriff as he nibbled on a stalk of red vegetable protein.

"Haven't seen you in here lately," Blinton trilled. Not for four days anyway; that's how long I've been laying for you.

"Been busy with the Ambassador's new idea. Contingency

planning. You'll probably be hit with it soon. Everyone will have to draw up plans for dealing with every conceivable emergency. Quakes, plague, war, insurrection, new vices. Ain't nobody or nuthin' gonna ketch this embassy by surprise."

But who does the real work while this planning goes on? Blinton stabbed her fork into a chunk of meatmeal. She could see it now. Department meetings to announce the need for contingency plans. Another meeting to gather ideas. Days wasted threshing them out, deciding how to best meet emergencies. Write a first draft; hold a meeting to discuss it. Rewrite. Submit to the Ambassador's administrative assistant and a week later it comes back with "inadequate" or "part IV needs more work" scribbled in the margin. How could her staff study Kronig if everyone had to waste time brainstorming how to cope with an infinity of improbable emergencies?

But then the Ambassador probably didn't *want* any real work done; taking action meant taking risks. A policy might backfire and interfere with his chances of snagging a post on a more civilized planet. Blinton had seen it before, which was why she requested frontier assignments. The people were generally younger and had to be more hard-working if they wanted to rise. The Ambassador, though, had reached the age where he couldn't afford a mistake.

So he kept the Embassy playing at busy work while the Molots moved in and the Kronigians grew more paranoid by the day, jeopardizing the whole Embassy.

She shoved her plate away. "When's the next personnel allotment due?"

"I don't know. Something's happening in the Dulbaniq sector and our staffing is frozen for the duration."

"Another 'protective reaction' against the Molots?"

He shrugged. "Even my sources in communications don't know. Whatever it is, the Ambassador won't get his 32 new people until it's over."

Thirty-two? Rage mounted; she fought to keep her face normal. The Ambassador's latest increment was more than her entire staff in legation days. The Embassy was choking on flesh; no wonder nothing got done.

Blinton activated the spy screens concealed in her chron (in case someone had a bug on her) and leaned forward, hand masking her mouth against cameras. "Jeremy, I need a dozen agronomists. When you set up the talent profiles for the new 32, you could slip them in. I don't care what their primary roles are—they can be psychs or mechs or even stenos. Just get me 12 people who know something about farming and I'll handle the transfers once they're here."

She hunched her shoulders as she

whispered, letting her halter-vest gape. Come on, look at my breasts. You were hot enough for them once before. But Jeremy rubbed his nose and scratched an elbow, looking away. "Could you get me six?" she pleaded.

"One of Llan's assistants monitors the outgoing material. Security, he says. I might not be able to slip it past him, and if it was spotted I couldn't justify it. You're the only one in the Embassy who wants farmers. I'd like to, but I can't."

IT WAS COOL and dim in the chambers of the Kronigian equivalent of pope. Enticing aromas tickled her nose; the furnishings or the Kronigian himself? Blinton shifted uncomfortably on the high knobbed stool as he puffed up his bladders to speak in fluting whistles: "You promised us many things. Tools. New materials. Knowledge. Yet since your initial gifts eleven cycles of eleven have passed with naught but talk. Why?"

Why indeed? Blinton remembered her inspiration to give them a few score telescopes, which would be useful and have minimal cultural disruptions. But just getting in to see the head of the sociology department had taken two appointments. Appointments! In her legation days an intercom call would have sufficed. Once she'd penetrated to Westerial's inner sanctum, the woman had stalled her for a

staff report. The excuse was that she was still waiting for said report, but Blinton's informants said Llan had found out about her idea and vetoed it.

How can I explain bureaucratic inefficiency, an Ambassador who prefers planning parties to negotiating, and a Naval Attache who checks my every effort? Damn Llan. The Ambassador's inertia is understandable, but the Naval Attache is smart enough to realize what will happen if the Molots get in and distrust the Kronigian culture. Why is he—

She realized the priest was impatient. Hurriedly, she said, "Unfortunately the ship that was supposed to bring our new gifts was delayed. We hope that in a few—"

His whistle was high-pitched. "The last two ships have brought many humans. What do they do?"

Good question, although asked for paranoid reasons. She frowned at the computer translator hanging between her breasts. "It takes many humans to fully study your world."

But that didn't satisfy. The head priest began to reel off the names of everyone who'd been assigned to the planet when the legation was upgraded to embassy and demanded to know what each did. The Ambassador was easy to explain; she called him the new head priest. But how to present the difference between a sociotech and a recreation therapist? And why the Embassy needed six of each?

Blinton struggled along but when he dismissed her she knew he wasn't satisfied. She studied the simple tomic on the seneschal's torso as he led her out. Its sole decoration was a green stripe around the waist. Utilitarian, like the bare stone walls of the castle corridors. Bare even of Kronigians—they didn't clutter up their homes with excess retainers. Blinton thought of the Terran Embassy and her office, and wondered how she could feel so lonely in the midst of so many people. Perhaps she should take an old friend to bed tonight, instead of that Programs Analysis Officer she'd been working on.

A dark figure in an alcove broke her reverie. A Molot. Wearing the cobalt and blue chevrons of the diplomatic corps where its light gray body turned ebony on its dorsal surfaces. Like a great frog it squatted there, looking out the narrow embrasure. Waiting its turn for an audience? Under one short arm a metal case gleamed. Blinton let the seneschal continue on as she froze, squinting at the alien characters on the box, then hurried after.

An atomic drill, she thought numbly, as she lofted into the evening sky. More than just a useful tool to snag the Kronigians on advanced technology. A potential weapon.

IT TOOK HER four days to find an agreeable code clerk, three hours to bring him to her room. While he

slept, drained, she injected him with 3 cc of di-sodium lithanol and implanted a sequence of subconscious commands.

Three watches later, while encoding a routine status report, he transposed two digits.

The new code combination would have requisitioned a complete set of memory cubes on farming through the ages. Unfortunately a sharp-eyed naval cadet caught the "error." Blinton learned of the clerk's demotion when he came shuffling by for a consolation screw. She soothed him, sent him on his way, then soared off skyward where she could rage in safety.

THE AMBASSADOR'S PARTY took place in the castle's great hall. Glo-globes emitting bursts of human, Molot and Kronigian colors drifted under arches and between columns; tangers wafted an odd scent calculated to relax the olfactory organs of all three races. How festive we must seem to our enemies, Blinton thought, nodding automatically to passing humans. She swirled the nektarile in her snifter, wondering how long she had to stick around.

She tried to count the humans present but gave up at 205. Nearly the entire Embassy was present. Depressing, to see so many people, so many unfamiliar faces, with every human on the planet pulled into one place by the social event of the year. She let the current carry her

into an alcove with an ecologist (*the ecologist!*) from her original legation staff and they drank to the old days. But his caresses failed to cheer her.

The Ambassador meandered through the crowd, syncophants ed-dying in his wake. Through her glass Blinton studied the bits of metal and plastic decorating his chest. Forty years till I'm pensioned; what are *my* chances of an Embassy command and being able to straighten out this messed up diplomatic service? To be precise, what are my connections in either the Navy or Throne? She tossed off her drink and went in search of more.

Buck up, Blinton, get to work. Talk respectfully to your superiors. Share a joke with your equals. Be polite with just a *trace* of condescension (keep 'em in their places) to your inferiors. So what if this planet is lost; you've still got your career to think about. There'll be other conferences, other votes. So get out there and mix.

A trio of Kronigians wandered by. They halted to talk to the Ambassador and automatically arranged themselves in a triangle to cover each others' backs. A Kronigian gathering must be pretty wild, Blinton thought, smiling at the defense posture. Oh oh—the Ambassador was trying to chat with them without using his translator. The aide behind him winced and motioned for another drink.

"Isn't it a wonderful party?" Jeremy materialized at her side, one hand discretely tucked in that of a long-limbed woman in an engineering uniform.

"Best one I've been to all night." Blinton eyed the find: good breasts. The engineer looked away though. Already taken. Best leave her alone anyway; Jeremy was too useful to alienate. Unless they wanted to try it with three. . .

She started as the Personnel Officer took her arm and leaned close. "The Navy boys are annoyed with a certain diplomat who keeps trying to go outside channels. As long as they think they're outmaneuvering you they'll let it go on, but if they decide you're putting one past them, there may be some overt response." His eyebrows arched for a moment and he disappeared into the throng with his new friend.

Moodily she climbed up into one of the pulpit-like structures extruding from the columns. At least up there she didn't have to play the polite social games with people she didn't like but had to placate. Ah, there was Llan, holding court down by the stocks. Lesser Navy officers surrounded him; others dotted the hall. . .

Lots of Navy officers.

Blinton lowered her snifter, frowning, and began to count the Navy men present. Llan's planetside staff consisted of only 13, plus those manning the watch ship.

The Navy protected its secrets, of

course, but the ship contingent was supposed to be only a handful.

She counted 35.

Over half wearing the blue rosettes of Llan's clan.

Blinton studied her antagonist. The party had drawn his followers out of their hiding places in the sky, but even so there must be some left to man the ship. Say, a minimum watch of eight. That meant he had 43 to 45 officers assigned to him. Three times the normal staff for a minor planet like Kronig. Especially in peacetime—

So that was it.

Blinton closed her eyes and slumped against the cold stone pillar. Of all the corrupt, foul, loathsome— Mastering herself, she let the party burst upon her senses again and chugged her drink. She dared not be weak.

No wonder Llan blocked her efforts. He didn't want the Terran Hegemony to negotiate a successful treaty with the Kronigians. He wanted the Molots to succeed, so that a war would result. Perhaps not immediately, but a few years down the line, the Navy would denounce the increasing Molot influence in the sector and launch a "protective reaction." Military action equals career advances. Simple. And who would be in the best position to benefit but the naval staff on the scene, already thoroughly back-grounded.

Blinton arranged her face and carriage and started down the stairs,

placing one foot carefully in front of the other. Wouldn't do to have an accident now, oh no. She'd have to be very careful in the coming months. People who get in the way of well-laid schemes have a demonstrably higher accident rate.

Options: take Llan to bed? Make a peace offering of her body? It was a tactic that had served her well in the past, but satyr though he be, she doubted he'd halt his rise to power for a good lay.

Assassination? In her career she'd avoided the temptations to eliminate rivals, although several times she'd had opportunities. But for these stakes. . . She could invite him flying, just a casual jaunt—let him think it a peace offering. Play up to him a bit, and when he made a pass let him get in close and tap a scrambler against his spine.

No, he'd be too cagy. Navy officers don't rise without having survived dozens of simple assassination attempts of the sort a novice like herself could muster. And then a Navy Star Chamber inquisition—out of the question. She shuddered.

She let the crowd sweep her away and reverted to her social greeting mode. Nod, smile, stop to joke, smile, an extra second of eye contact for you, squeeze an arm. And she thought: she could always just give up. "Yes, isn't it a grand party! And your outfit. . . ." She could pretend not to know what was going on, wait for the routine transfer to another world, and not get

crushed in Llan's machinations. "Oh, I think she's being outrageous. Too much quoppe." How would it feel to live inside one's head after abandoning a planet of a Navy-Molot war?

"Madame Jana Blinton. My pleasure."

A Molot squatted before her, great bulk slumped on the flagstones, upper appendages spread in a gesture of greeting. She replied in turn, which was the signal for an involuted monologue on a fine point of Kronigian botany. Skillful banter, she noted professionally, before drifting back to her own worries. This creature was the fourth point of the maneuvering between herself, Llan and the Kronigians. His enigmatic race was expanding through the same arm of the galaxy as the Terran Hegemony. With a difference. While humanity ballooned out in a sphere centered on Old Sol, the Molot domain was a cylinder of constant radius expanding at both ends. Actually no one knew for sure what the far end was doing, but the one intersecting human space was giving Throne and Navy planners alike something to worry about.

She had a sudden vision of planets stacked atop one another in a great pyramid through time, with Kronig at the base. And herself fighting off those who wanted to pull it out and bring the stack crashing down. Damn. If only she were free to act—

A void in the conversation jerked

her out of her brooding. She realized both of the Molot's eye clusters were on her. No, lower. Her empty snifter.

"I said, if you humans concentrated more on work and less on pleasure, perhaps you would accomplish more."

It would be amusing to violate every diplomatic and ethical tradition by smashing his face in. No, the Molot was baiting on purpose. Why? She opened her mouth to reply—and heard a faint whistling behind her.

She lifted her glass and scrutinized it, adopting a mock-serious expression for the Molot's benefit. The reflection showed a trio of Kronigians behind her. Waiting to see what she might reveal in a moment of alcoholic carelessness.

Her mind cleared; inspiration flared. She giggled and staggered forward a step. "You wait and see what the Ambassador's going to do," she said loudly. "He isn't bringing all those people here just to study flowers." With that she lurched off toward the bar, wondering if she hadn't just thrown away her career on a very long shot.

SKULL-THROB pounding: burst of interior drum savagry. Blinton rolled over, grimacing, trying to shut out the noise. Finally she conceded to herself that she was awake. "Who the hell is it?" she grumbled, fumbling for the light. It seared her eyes. When she could see

she found the chron. 0500. "Shit." Blinton lurched out of bed and found a robe. Belting it loosely shut, she heaved the antique wooden door open.

It was Llan. Just what her hang-over needed. But he was panting, and his uniform mussed for the first time since he'd come to Kronig. What—

"Something's gone wrong," he ground out. "The head priest just announced we're being kicked off Kronig and we've 48 hours to be gone." Two men dashed down the hall behind him, shouting.

Blinton's hand closed her robe as his eyes dropped. *Did I succeed?* "All of us?" she asked.

"No, we blustered and argued and finally convinced them to allow a skeleton staff to stay on. It'll be the original legation you headed. They're not afraid of that," he sneered. "Of course you won't have the personnel to do anything, just show the flag and negotiate for the return of a full embassy." He sighed and pulled out a crumpled list. "Now here's what the Ambassador wants you to do while he's gone. First, contingency planning."

He was gratified to see her burst into tears at the extent of their predicament. It confirmed his opinion of her as a female who didn't have what it took for real responsibility.

But he could not understand why, when he tried to take her in his arms to comfort her, her knee came up so sharply. ★

A STEP FARTHER OUT

TECHNOLOGICAL EXPERTISE— A DIMINISHING RESOURCE?

A FEW WEEKS AGO I was called to testify before the California Legislative Committee on Energy and Diminishing Resources. The very existence of such a committee is a sign of the times: no one would have expected the legislature to spend money and effort on such issues a few years ago.

It was even more surprising that they would ask a science fiction writer to appear on a program that included Joseph Coates of the Office of Technology Assessment; Herman Kahn of the Hudson Institute; Paolo Soleri, arcologist extraordinary; and a star-studded group of academic experts.

To be honest, the Committee originally wanted another science fiction writer and science columnist, but he wouldn't travel from the East Coast to California; so they had to

settle for me. It was an interesting experience all the same, and I thank Dr. Asimov for putting my name into their hopper.

I'm not at all sure the hearings were as useful as the Chairman, Assemblyman Charles Warren, thought they would be. To begin with, the committee hearing format isn't too productive. There wasn't any interchange among the participants; instead, each "expert" gave a set presentation, followed by a few minutes of questions by Committee members who might or might not have been listening to what had been said.

That kind of dog and pony show doesn't always produce exciting new ideas. With every word taped, and plenty of time to think in advance about what you're going to say, you tend to be rather careful.

It's going to be public record, after all, and if you make specific predictions you may be called on to account for them sometime in future.

As a matter of fact, that's one of the topics I chose to speak on: how to get more information and ideas across the barrier from the scientific community to the political community.

There are a lot of formal mechanisms for transmission across that barrier. There are commissions and institutes, and staff conferences, and formal papers—and every one of them suffers from the defects inherent in such formal systems.

You don't get the nuances, and you don't get the wild ideas that just might turn out to warn politicians of an upcoming problem. When you write a formal paper you don't know just what your audience knows (and what it doesn't know but can't admit publicly that it doesn't know).

As a matter of fact, one of my suggestions was that the Committee members make a firm resolution to take a scientist to lunch once a month, with no formal papers and no statements for quotation. A second suggestion was that there ought to be periodic conventions with no program; science people and political people ought to be put in an atmosphere of informal conversation and left to communicate.

I don't know if it will work, but I've seen a lot of good come from downstairs meetings held while

formal papers are being read in the convention ballroom. . .

ANOTHER PROBLEM was a discrepancy in expectations. The Committee Chairman wanted specific predictions. The political authorities have been hit with a series of crises: inflation, energy shortages, pollution, the ecology movement, collapse of aerospace as a major employer, etc., etc., and it seemed reasonable to Mr. Warren that the Committee might get a hint of what was to come, so that the legislature wouldn't have to operate in a continuous atmosphere of crisis management.

I didn't hear all the testimony, but most of the experts seemed more inclined to discuss philosophy and sociology, rather than get specific. One chap did talk about diminishing resources, specifically metals like tin, but even there he had to say there were tradeoffs that would help weather the problem.

I don't think the Committee members were expecting a philosophical debate; but in a very real sense maybe that's precisely what's needed. Obviously most of the expert witnesses thought so. Here's why: until you have some basic assumptions about the nature of the future, you're going to have real problems planning for it.

THE LEAD-OFF speaker was Herman Kahn. I hadn't seen him for perhaps ten years, although of

course I've read a number of his works. He hasn't changed, except that he's grown a short, full beard.

Herman is a fascinating speaker. He generates strong emotions in people: very few can listen to him without either nodding in agreement or violently shaking their heads.

No one wants to argue with him, because those who take him on in debate generally lose. That doesn't mean that Herman is invariably right: it just means that you'll probably lose a debate with him.

Plato mentions that phenomenon in his dialogues: an opponent is silenced but not convinced. Herman has that effect on people. On the other hand, he can be pretty convincing, too.

The Sierra Club representative, asked later about Herman's presentation, summed it up this way: "You've just heard a massive dose of Pollyanaism from the Boss Pollyanna of them all." The fact that Herman Kahn had, during his testimony, offered to prove that the Sierra Club cost the US over 25 billion dollars in the past few years may have had something to do with their representative's attitude, of course.

Herman Kahn's presentation was basically one of philosophical world view. There are two currently important views, Kahn said: Neo-Malthusian beliefs, which can be summarized by saying the world is a finite "fixed pie" out of which we can take just so much and no

more; and a Post-Industrial view that says the world-model should be seen as a growing pie, with no one able to predict what we can produce.

He went on to summarize both views, and to describe one of his characteristic tricks that excite either admiration or hatred. In his public lectures, he passes around charts that summarize the two world views. Then he asks the audience to vote on which view they hold.

He also asks them to vote on the confidence with which they hold it, and there's where the joker comes in. The Neo-Malthusian summary is stated in dogmatic terms. There are no qualifiers in it at all.

The Post-Industrial perspective is full of qualifiers such as "within limits", and "no one knows but the best guess is", and "if we are reasonably prudent", and the like.

He's been conducting this poll all over the country, and the results are a little frightening. Most college students accept the Malthusian perspective—and profess a great deal of confidence in it.

As Herman points out with some glee, there's got to be something wrong with an educational system that produces this result. It may be that the Malthusians are right, but no one has a right to be that confident—and particularly no one has a right to be confident about the view as Herman wrote it.

It's more dogmatic than any medieval scholastic's catechism.

THORSTEIN VEBLEN once wrote about "trained incapacity." Herman Kahn called it "educated incapacity." Our schools, he said, are systematically teaching not only unreal views of the world—but views which are *known* to be unreal.

He was taught in high school, for example, that "wars never settle anything." Now anyone who cares to can in about five minutes come up with a list of at least a hundred things that wars have settled. Canada is English, not French. The Third Reich does not control the Suez Canal and the Middle East oil fields. Israel exists.

Yet for generations students were taught the catch-phrase "wars never settle anything." Perhaps they don't, but it's certain that if that cliché contains a truth it's a subtle one not learned by ceaseless repetition.

As another example: Neo-Malthusian arguments are generally based on exponential curves. An exponential curve is one that rises slowly at first, gets steeper and steeper, and eventually becomes near vertical. You can fit an exponential curve to a number of modern phenomena: population, pollution, energy consumption, depletion of natural resources, etc., etc.

On the other hand, there are no exponential curves in nature. Natural phenomena that look like exponentials turn out in the long run to be "S" curves. That is, at first they look like exponentials, but

eventually they turn just the other way. Given the latest census data, for example, the population trend of the US is much better fitted by an S curve than by an exponential.

Now there's more at stake here than the technical question of which curve best fits present trends, because as Herman is fond of pointing out, more and more educated people simply accept what they've been taught without even considering that there might be an alternative: and that fundamental world-view translates into action.

Indeed, anyone who seriously believes that the world is on an exponential road to crisis and die-off must try to do something about it—or confess to having no more moral sensitivity than a weasel.

I've been through my exercise in "technological optimism", and I won't subject GALAXY readers to it again (just now); but it's interesting how the testimony of the experts did seem to bring out one point—and by accident I made that point the central theme of my own testimony.

There's pretty general agreement among both Neo-Malthusians and Post-Industrialists that we've got some problems, and if we're to find a way out of them we'll need some highly educated talent. Technology got us where we are, and created most of our problems. It will take technology to get us out of them.

It doesn't matter which way you think is "out", either. Even if you

believe that the only hope for the world is to de-emphasize technology, change our goals, learn to settle for fewer gadgets and gimcricks and miracle drugs and Coca-Cola and transistor radios and high quality stereo systems and electric canopeners and paperback books and cheap trips to Europe and cheap nylon backpacking gear and sleeping bags, and the rest: even if you'd like us to go to the simple unspoiled life, getting there is not going to be easy.

The Luddite solution—"Smash the machines!"—is *not* going to lead to high quality of life for very many people. It may even lead to a counter action by those who operate those machines or depend on their output.

On the other hand, if you believe with Herman Kahn that the world population is likely to stabilize at around 15 billion in the 21st Century, and that we've got the resources to produce a Gross World Product of some \$20,000 per capita for those 15 billions—and do it forever—you still can't think it's going to happen automatically.

"It's going to take people who understand technology whether we want to have more of it or start dismantling it.

DESPITE our enormous investment in public higher education, it's doubtful whether we're turning out the people we'll need for the world of tomorrow.

As Joseph Coates of the Office of

Technology Assessment put it, ask a recent college graduate in anything other than the hard sciences and engineering what he or she thinks they're prepared to do. A growing number of people invest a great deal of their lives in this magic thing called "education", which they are assured will let them live better lives—and find at the end that there's little demand for their "skills".

The United States, Coates said, has become very middle class. That has some benefits: when there's an automobile accident, it doesn't usually generate a fist fight. Instead we call our insurance company and the police.

We expect, in other words, that the System will have methods for dealing with our problems. If it can't, we expect it to change until it can.

That leads to a number of side effects. One is credentialism: we don't ask if you can do a job, but ask what credentials you have to prove that you can do it. I think of a case near at hand: my wife teaches teen-age illiterates to read. She works in a detention center.

When she first went there she was hired under a contract that stated quite plainly that unless those kids learned to read, she didn't get paid. She gets paid, so there's objective evidence that she knows how to do her job.

She also has to take classes in order to keep her position. It's in-

teresting to look at the experience and performance record of some of the "experts" she has to take classes from.

Another side effect is increasing detachment from the primary processes: Coates listed a number of specific questions (among others, "How is this nylon rug made? Where do sesame seeds come from? How does a satellite get up and what keeps it there? Through how many hands does our food pass from farmer to our table? What does a carburetor do? How does television work?") that he claimed most 'educated' people couldn't answer.

To my horror he got nods of agreement from much of the assembled company. They were all college graduates and many were officials on whose decisions our lives depend.

Ortega y Gasset wrote fifty years ago that the "mass man" accepts the products of civilization as a kitchen accepts milk, with no more understanding of civilization than the cat has of dairies.

THAT BRINGS US at long last to my own presentation: a crisis prediction.

People are living longer, and fewer are born. The trend is easily seen: we have an aging work force. By the end of this century—in fact, well before then—we'll have many more retired people and comparatively fewer productive workers.

No problem is more easily foreseen, but I've yet to see anyone planning for it.

Now we have also encouraged political activism, and we have extended the franchise to nearly every conceivable group. Certainly all those retired people are going to vote to keep their standard of living from falling.

Where's the money—or productive goods if you think we'll be beyond money by then—to come from? Certainly not from savings. Social Security has no money, only bonds, which is to say the authority to tax. The whole Social Security system is geared to a growth economy. It assumes you can tax the current work force to support the retired work force—and therefore assumes that the current work force will be larger than the retired group.

That's not going to be the situation within a few years.

The only way out is either a general lowering of everyone's living standard, or increased productivity per employed worker. Or both. The recent trend in productivity isn't encouraging, though; it's going down.

As a technological optimist my suggestion is to get productivity back up. The Neo-Malthusians will doubtless have their own suggestions, but the problem is quite real, and quite predictable.

Query: is our educational system organized to produce the trained talent we'll need to meet the crisis?

I'd say no. In a recent visit to UCLA Book Store I noticed that the largest single book section was reserved for "Subject A" textbooks. Subject A is the modern euphemism for what was called Bonehead English in my day.

I suggest that when California, said to have the best public higher-education system in the world, can't find among all its dozens of Universities and State Colleges and Polytechnical Universities and Community Colleges, *one* undergraduate institution that doesn't take in students in need of Bonehead English, we're in trouble.

Sure, the state should provide a means for correcting deficiencies in lower level education. If education is conceived as a magic leveller of class differences, then Bonehead English at the top undergraduate institutions makes sense; but if public higher education is supposed to be an investment for the future, it becomes questionable. We need *one* public university that takes only the cream of the student population. Cal Tech can't possibly produce all the really top-flight engineers and scientists we're going to need.

Higher education has another interesting phenomenon: department budgets are based, not on projected needs for graduates thereof, but on enrollment. The more students a department can attract, the larger its staff, the more promotions for its faculty, the more undergraduate assistantships, and the more public re-

sources that department is given.

In effect the public authorities are inviting recent high school graduates to allocate educational resources. Control of perhaps our most important public investment is left to those who by definition haven't the qualifications to do it.

The freshman student is expected to predict for himself where he'll be needed: to make the most fundamental decision of his life in the atmosphere of an oriental rug market. He's given very little help, and the public interest is hardly represented at all.

The results are grim. Our education systems look as if we think our future problems will be solved by training enormous numbers of social scientists, teachers, and the like. Does anyone seriously believe this method will meet the problem of producing enough goods to support those retired people we know we'll have around in a few years? For that matter, does anyone seriously believe that expanding departments of education makes sense at a time when birth rates are at an all-time low?

SCIENCE magazine recently published a study of employment among engineers and scientists. As you might expect, technically trained people have the lowest unemployment rate of all groups in this country. There are specific problem areas, and middle-aged aerospace engineers in particular have employment problems, but by

and large there's more demand for technically educated people than there are graduates.

THIS IS HARDLY the result of planning. In 1969 the technical professions were hard hit by government cut-backs. As a result fewer students enrolled in those departments. Now we have shortages. This will spur demand, which will build up enrollment. SCIENCE says "The experience of geologists—who eight years ago were a glut on the market and are now at a premium—is like a bad parody of manpower planning."

That, boiled to its essence, was my presentation. Because I'm a science fiction writer and it was expected of me, I talked a bit about far-out technology: bringing icebergs from the Antarctic to Los Angeles to meet our water shortage, using the thermal capacity of the Sea of Cortez as a long-term solution to the energy crisis, laser-launching systems to get orbital power plants, and that sort of thing. None of it would be thought far-out by GALAXY readers, as indeed none of it is; I was careful to stay with concepts that have a fair chance of economic feasibility within the next 30 years. I expect that's what drew most of the attention.

That sort of thing, though, is implied in my choice of world views. If you accept the proposition that technology can, intelligently

applied, cope with the problems technology has created, then it becomes a matter of hard study as to which technological solutions ought to be investigated.

If you don't accept that proposition, then any specific technological suggestion is probably obscene, since it implies that we ought to use even more resources to bail ourselves out of the short term crises, thus putting off the fundamental restructuring we'll have to face someday.

I wasn't paid for my appearance and I didn't have long to prepare for it. I expect I should have made a bigger impact than I probably did. Even now, though, after listening to the other experts, and thinking about what I should have said, I'm still convinced that my prediction was correct: we're about to face a shortage of trained talent, and our education establishment isn't geared to do anything about it.

I remain an optimist: we'll do something. But I wish those responsible for investing public money in higher education would stop and take a long look at what we're doing and what we're going to need in future.

At the least, couldn't we subsidize tuition in engineering colleges as well as find scholarships for those in the *big* departments? And can't we have *one* undergraduate institution that just won't accept students who need Bonehead English?

★

CRAIG STRETE



*That which has never lived
can never die!*

TO SEE THE CITY SITTING ON ITS BUILDINGS

HE WAS ONE of the last old people of summer and he came out on a hill, maybe the only hill left. They were gathered there. The old, the young, and the no longer restless, all gathered. And he sat by the cold fires and not knowing or caring if any listened he said "I will go do what I have to do." The trees and birds listened. The people listened. It was a time when all things listened for there were soon to be none left to speak.

The people looked at him like birds seeing torn feathers. They said "The world ends tonight. You can not leave your song here and go. Do not leave your song here. It will warm itself by the fire. It will wait for you by the fire. But not for long." All this was said with

turned-away faces and with silence.

They said "Do not go. Your song will go outside to wait for you when you do not return. It will sit away from the fire. It will get cold." This was said with busy motions and precious moments. That is what they said.

"Tomorrow is cold for all songs," he said. And they knew he was right. They knew he was right.

"I will go," he said.

"How will you go," they asked.

"I will go as an owl. I will go see the city sitting on its buildings." And quietly, like a hawk without claws, he went away over the soft ground.

And the people shook their heads as he went. And the old ones, thinking of him, could not see his face in their minds. He was an owl and owls when the world ends say, "Don't look at me with your eyes."

There was a place he went to first. It was above the city. It was a high place built of concrete and steel on ground where once a hill had stood. It was built there so that one could take pictures of the city to send home. He was not there to send pictures home.

He who had lived his life in a long shadow of a city now felt the first moment of going from a darkened room out into the light. Somewhere down there in the shadow of the city, the sky was hidden. He knew his strength by the distance he could see and down

there in the city, he would be blind and bent in shadows. But he had to go down there. And the world was ending and all the city was ending. In his heart he knew it was ending, knew that the grey place that did not live was ending but his heart knew it was not enough.

He drew his arm across his face in a wing and feather motion, shielding his eyes from the sharp face of the sun. Softly like a bird he moved, like a bird about to soar. He said, "I will fascinate you. I will tear out your eyes with spirit teeth."

And he laughed and laughed.

And below him, the city sat on its buildings.

And he laughed and laughed.

And Detroit screamed on its wheels.

And Chicago slid on slaughtered animals.

And the old man sucked it up in his breath. The panic of an animal city was like telltale smoke to an owl.

And Los Angeles waited like pregnancy in unmoving traffic.

And the skyline of New York, for the first time, did not cast any shadows.

And the old man tore it away like cobwebs and laughed and laughed.

And the closed eyes of animals with their heads to the ground, moved slowly with flies.

And the old man saw it. He saw the city burning. The concrete, the steel, the brick and iron, all burn-

ing. And the wood of dead trees was rusting. And he laughed, sharpening claws he never had. And there was a song, a little song from his memory and it too was burning.

And the song said "Go to sleep and do not cry. Your mother is dead and still you feed upon her breasts." That is what the song said. It was the end-of-the-world song of a hungry spider who spins his web, knowing how to die.

Back there on the hill, the old man's song got cold waiting for him. And the people set all the dances on fire. All the dances on fire. And they packed them away still burning with handfuls of dirt, red earth like pipestone. They gave the dances all burning to mother earth. Only mother earth can keep dances when the world ends.

The old man stood in the harsh glare of the city, wrapped in the soft protection of folded wings of memory. The air around him was alive with flame as his memories got stronger and the earth moved beneath him with the power of living before him and after him. He felt the earth moving under his feet like a child spinning around and around in a secret place known only to boys. Tomorrow was cold and burnt away to ash. But in the secret place that lived yet inside of him, the current was slow and the warm brown river seemed to be standing still.

And the reason that had sent him away from the hill, when the people

gathered, came up the brown river and he could not say her name. No, he could not say her name. Not even now when the world was ending, could he say her name. For the dead take their names with them out of the world.

But he thought of her in this time of the coming back, in this time of the world ending and coming out of the ground. His old woman had not come out of the ground. That was why he was there. That was why he was there to see the city sitting on its buildings.

There to see the city that had hidden the sky. The other people had buried their city on her grave.

He listened. He did not hear the scratching of her fingers as she clawed at the city above her. Or did he? Was the long animal cry of the city her cry too? Was it her moving-in-the-grave sound?

The ears of the owl are sharp and he listened. And then he knew he heard her. The owl can hear many things when the world ends and he heard her. The scratching, the painful scratching of her moving.

"She can not come up through the sidewalk's concrete," he said. That is what he said. And in his face he took her hammer and beat her name into ashes and beat those ashes into a hammer. But the spirit calling of her to come was not enough. They had buried a city on her grave.

He closed his eyes and he said, "I will wait and watch. I will not

go down there yet. I will not speak and see if they do not move the city. They do not need the city anymore. Maybe they will tear it down now."

He was an owl and that is what he said.

But they did not move the city. He waited and watched. An owl waited and watched but they did not move the city. The other people had buried their city. It was behind them even though they still lived in it. They had buried their city.

He was an owl and he knew this. He had heard them. He saw them through the eyes of sick animals. The sun was going to come at them and they had gathered together like a swarm of locusts. They were like storm-frightened cattle and the wings of frightened birds brought their words to him. They said "Let's swim to the moon."

He was an owl and that is what they said.

The old man looked up at the flaming sky of high-sun time. It was hot like a pot oven and the sun was spinning like a wounded spider, dangling closer to its prey on a single strand of fire. It filled the sky and moved quickly to the west. Moving fast like a thrown spear, the sun pulled night after it like a blanket. It was dark coming at noon. It was the end of the world coming and darkness and flames. Flames and then darkness.

"I am an owl. I live in the dark. I will not be angry when it grows

dark."

That was what he said but things within him snapped like twigs in the summer and he sat down on the ground like an old man. He sat down like an old man.

"I am not an owl!" he cried and he beat the ground with fists not wings.

"I shall fascinate you. I shall tear out your eyes with spirit teeth," he said and he laughed and laughed and the sound of his laughter was a noise in a hollow barrel and the warm tears ran out of his eyes into the ground. He was an old man. And old men cry when the world ends.

Back on the hill they were gathered. His song had grown cold. His song had no relatives. All his relatives were gone. They could not be there. The other people had buried their cities on them and the sun could not see them down there under the city.

And in the city in buildings called museums there were rustling sounds and weeping sounds. In cold grey filing cabinets the bones of the old ones stirred uneasily. In vaults, in labeled boxes, the bones of the old ones cried restlessly and they could not get free. In one box the leg, an arm in another, the skull filling with tears in a long display case in another room. And the Sun could not reach them and Mother Earth could not bring them awake and they wept, quietly, quietly, in the museums. And they wept.

The old ones, and the young ones and the no longer restless ones were sitting quietly on the hill. They talked and laughed with their relatives. Far away on something like a hill, the owl knew what they said. They said, "It is a good day today." They said, "We have today and each other. It is a good day to die." And behind all these words, they said one other thing and that was a shy thing that could not be spoken. So it was said with a time of quiet, or a soft look or a touch. It was said between father and child, between man and woman, with quiet movements that brought them together. All together. They were there with the ground people and the animal people. All together. They were there and the world was ending and they were there. And with faces, not words, they said "No one here gets out alive."

There was a cold thing coming out of the man's heart. His cold song had come for him. The wind had blown his song away and it had come for him.

The people on the hill did not see his song blow away because in the last of the time left they only had eyes for each other, only had eyes for those of their own kind and he had told them he was an owl. That is what he told them. They could not see his face, all silver and golden, in their minds. They thought he was an owl and owls when the world ends say, "Don't look at me with your eyes."

Buried animal and ground people were trying to reach out through the cracks in sidewalks. The ground people moved restlessly under the concrete.

"I will fascinate. I will roll my dead fist in your dead eyes." He raised his fist at the city and did not laugh. He could hear her under the concrete, scratching, scratching.

The world was ending but the city did not know. There were corpses in clown suits running across each other's bodies on rat legs in the city. There were awkward throats moving out of habit, saying "Pile the bodies here and here."

Cheated monkeys with jaded tongues screamed across the years saying, "I promised to drown myself." Loud noises choked small throats and softly, softly, like whining children who write on walls, they tumbled over each other in the darkness of a city that sat on its buildings. And the city did not see an old man take a hammer from a store with a broken window. And the city did not see an old man with a hammer trying to move a city.

He swung and hit and swung and hit but cities are dead and forever when the world ends. He broke the hammer. The hammer broke on the concrete. And broken he sat down like an old man and said, "I want my old woman." And his voice was a tearing sound. "I am not an owl. I want my old woman." This is what he said and his fists hid his eyes and his shoulders shook.

There was a man with a book down there in the city. He was all blood and death and writing in a page and he touched the old man on the shoulder with his book. He touched the old man on the shoulder and he spoke. His ancient words went through the air like a knife and his book was bound in snake-skin. But the old man had been an owl. The book man ran away. He ran away holding his book with his knees.

It was getting hot like a summer grass fire and the old man looked up. But the sky was hidden by the city. He had come to the city to find his old woman and now he had lost the sky in the city that hid it. And old men and owls need the sky when the world ends.

He wanted to run away from there. He wanted to fall asleep watching the sky but he could not leave his old woman. He could not run. His song was gone in the wind now and he could not go.

He had gone to see the city sitting on its buildings and now the sky he could not see began to burn him. And the darkness was crawling across his shoulders. And the moon above was there in the hidden sky, chased by dead wishes. The moon was there. The blood moon was there, burning.

Hurting old men, hiding its mother, the city sat on its buildings when the world ended.

And the sky came apart like a wing tearing off. ★



Steven Utley

GOOD Captain Christopher,
was rowed ashore
to set his foot on a new world,
one which would never bear his name,
and to plant his banners
in the name of Spain in particular,
in the names of Europe and Civilization
in general.

He stood on the beach with his men,
and a fine autumn breeze
stirred his hair and cloak.

It was indeed a significant moment,
a grandly climactic one,
almost as though the sole purpose
of European civilization had been
to propel the captain and his seamen
across the Atlantic to this moment
on this strip of sand.

Watching from the trees
beyond the beach,
darker-hued men
shook their heads disbelievingly,
looked at one another questioningly
and whispered among themselves,
"Who are these invaders?"

None could say.
So they shrugged together and,
grinning mirthless grins,
began drawing back the bolts
of their machine guns.

THE DAY OF THE GRINGO

Mal Warwick

*One of the worst aspects of the
intrusion of civilization into a
primitive milieu is the loss
of traditional values. . .*



THERE WAS SHOUTING in the council hall, and the four-o'clock winds careening down the eastern pass were right on schedule, kicking up a fuss in the parched sands of the plaza. Brown legs braced in a tiny drift, rumpled brown poncho aflutter, the wild-eyed old man the weavers called "the witchdoctor" to impress the occasional tourists stood with his back to me. He was peering into a hubcap hung by a crude fiber rope on the cinderblock wall around Cisco's place, compulsively combing his long black hair with a two-peso plastic pocket comb he'd picked up at the weekly market. We exchanged wary nods as I trudged past.

Then it registered. That makeshift mirror wasn't a hubcap.

It was a convex spherical section of silvery metal, too warmly luminous to be chromium steel and too large for any automobile. At closer range, its brilliance seared my eyes, leaving afterimages of violet and blue, and the ruptured hole where the rope passed through revealed a matteyellow inner surface, astonishingly resilient and silky to the touch. The old man scowled as I examined it.

Whatever it was—I admit I'm a simpleton in matters technological—it would have been out of place in Ohio. In Cuchipamba its presence was deeply disturbing.

Behind the wall there was none of the squealing and whining of wood on wood that comes from in-

side the house when Cisco's looms are in use. On the radio a popular singer was assaulting a Latin ballad with intermittent bursts of lucidity, but no one I saw when I rounded the corner to investigate seemed the least bit concerned with the anguish in his bursting heart.

Tavio was there, fatter and taller and darker than the others, and Cisco and all the twelve-year-olds who work his looms, and a hostile little guy named José Antonio who never seemed to work at all. In identical white shirts and crisp broad-bottomed white pants, they were standing or squatting in the earthen courtyard in a semblance of a circle, with Tavio and a blaring radio at the center of attention. The radio was obviously new, and they seemed to be chiding him about it in rapid-fire Quechua, between laughs and gulps of Pepsi-Cola.

Tavio grinned when he saw me. "Hey! Meester Roberto! Back from the city?"

"Hey! Tavio! Cisco!"

At the sound of Spanish, the laughter ceased, and the animated conversation I only barely comprehended. Pointedly ignoring the companion mirror I glimpsed on the inside wall, I nodded to José Antonio and all the kids, with a "Hey!" and a couple of grunts for good measure, but international relations obviously hadn't mellowed while I'd been at the clinic. José Antonio turned away with a snort of loathing; and the kids were even

more skittish than usual. And as he ambled over Cisco was giving me one of those looks—his teeth were bared but he wasn't really smiling.

"Señor Roberto, how's it going? On your way to Balti's house?"

"No," I lied. "Just thought I'd walk around a little. See what's happening. You know."

"Of course, of course."

There was something Cisco wanted to say, and I'd have to wait it out.

Nodding, he turned to the house to bring me the obligatory pepsi. In the doorway was an unsteady pile of wall-hangings, stylized bird-gods wading through bright woolen skies. Cisco irreverently rummaged through them, then returned, thrusting a warm bottle into my hand, and took a couple of worn coins in exchange.

We stood together in uneasy silence while Tavio and José Antonio exchanged meaningful looks about the radio. It was an enormous Japanese-made set of the sort bought only by the richest Indians. When Tavio maneuvered the station-finder it made sounds like chalk dragged the wrong way over a blackboard. Every so often an explosion of heated Spanish or the frenzied cries of a love song would come blasting through too loudly to be understood, and Tavio would grin and José Antonio gravely shake his head.

José Antonio glanced momentarily in my direction but looked

through me to the wind-whipped sands beyond, his eyes boiling with contempt. With a fleet little smile that might have been meant for the wind, he took the set from Tavio's hand and slung it, still caterwauling, under one scrawny arm, collecting his hat and poncho with the other. Tavio looked crestfallen but made no move to stop him when off he trudged through the spiny green hedge behind the house, hugging the radio to his chest.

I was already intensely uncomfortable in the bottled heat of the courtyard, bundled up in a jacket I could only remove if I were willing to stay for hours. I raised my eyebrows in Cisco's direction as I swallowed a mouthful of tepid pepsi.

"How's business, Cisco? Get that big order off to the city?"

"Well, you know how it is when you don't stand right next to the kids. I've been out in the fields a lot."

"Sure. The drought."

"Always the drought."

Cisco shuffled his feet on the hard-packed soil, examining his toes, and silence descended again. One of the kids emerged from the house with a noisy radio and the pack of marked cards Cisco had gotten from a Peace Corps Volunteer with a poor sense of humor. The daily game of gin rummy was about to begin when Tavio wandered over to us, grinning a friendly grin.

"You see my new radio, Meester

Roberto? Two thousand one hundred pesos!"

"Hey, Tavio, that must be one helluva radio!"

"It gets Guayaquil, Lima, San Carlos—it's world-wide!"

Cisco was still hanging on. I asked Tavio idly, "José Antonio going to fix it for you?"

"Sure, Meester Roberto! You know that old Timex Juan Chango found in the city?" He stuck out his wrist, flashing a slender steel watch in obviously good condition.

"I thought you took that to a watchmaker."

"He said it was dead, but José Antonio fixed it." Tavio giggled suddenly. "And you remember that old bike Cisco bought for eleven hundred pesos?"

"—That rusty old bike Cisco bought because *Balti* had one?"

Laughing, Cisco jostled him by the shoulders.

"Well, José Antonio took that old bike and straightened everything out. Cisco resold it in the market for nineteen hundred pesos." Cisco was pounding Tavio's arm all the while, and finally drove him away to the card game with laughing abuse in Quechua.

"Tell me something, Señor Roberto," Cisco said as he caught his breath, "who's that new gringo?"

That was it. Cisco didn't like gringos around unless they bought his wall-hangings—certainly not one so machiavellian as to introduce

a cheaper loom the kids could afford to buy (but wouldn't). In taking this view he was in a small minority in Cuchipamba; most people didn't want gringos around at all.

"A new guy?" I asked.

"Just got in."

"Well, you know how it is. They come and they go. Sometimes I don't even meet them if they're tourists."

Cisco brightened. "You think he's a tourist?"

"I couldn't say."

"Maybe he is a tourist," he said hopefully.

"Maybe he is. You get those great new mirrors from him?"

Cisco beamed. "Pretty nice, aren't they? *Balti* sold them to me. Two hundred pesos."

Balti, I hoped, would be slightly more approachable.

I LEFT CISCO to his crooked gin rummy and started across the plaza again. The old man was still grooming himself in the impossible mirror, the ruckus in the council hall was proceeding unabated, and all around, against a backdrop of snow-covered picturebook peaks, the frail straw rooftops of the villagers' homes were sprinkled among the fields, lonely and lifeless under a brilliant cloudless sky. The whole scene smelled of decay and desperation, but I wasn't certain who was dying.

I was still more than twenty

pounds underweight from my recent bout with bacillary dysentery, hours overdue for a meal, and very, very cold. As the wind pushed me along in the direction of Balti's, I wondered what manner of masochism or dementia could have possessed me to return to the village for the remaining few months of my two-year term.

The hubbub inside the council hall diffracted into individual voices as I slowly drew near the path to Balti's. Twice I heard my own name among the babble. Chilled and slightly dizzy, I stepped up to the hall and squinted inside.

At the front of the dimly-lit meeting room were the old men of the village—Taita Toribio, Taita Eustacio, and nearly a dozen others—all half-drunk and shouting in turns. More than once, they'd confronted me with knives in hand on my way through the fields to visit the weavers; on other occasions, they'd threatened the weavers themselves. Now, the object of their fury was Bernardo Pichicaihua, president of the village council.

Bernardo was reclining uncomfortably on a bucket seat apparently removed from a sportscar driven a little too far into the village. Before him, on a low wooden table, was a profusion of hand-written papers, from which he was reading aloud in Spanish—a language the old men didn't understand. Their protests waned to an angry murmur as soon as they caught sight of me, but

Bernardo read on obliviously.

"... end of our wise and glorious Cuchipamba forefathers. Chapter one hundred fourteen. And when the *Conquistadores* arrived on ships and horses, everyone could see that their faces were white, and everyone who was subject to the Inca remembered what the old ones said, that the god Viracocha, whose face was white, would return to their hills and valleys on strange ships. Only our wise and glorious Cuchipamba forefathers, who knew that the *Conquistadores* were false gods and that the true Viracochas came only once every hundred years, did not succumb to the. . ."

Bernardo faltered, then looked up. "Taita Roberto, welcome!"

"Hey! Taita Bernardo! Taita Eustacio! Taita Toribio!" I went the rounds with grunts of greeting, but Bernardo alone came to the door.

"Welcome back!" He warmly took my hand in the Latin manner. "They fixed up your liver in the clinic?"

"Not only did they fix my liver, Taita Bernardo, they even cured what was wrong with me."

"You've got to watch those doctors, Taita Roberto. They always say it's something else." With a solicitous arm about my shoulder, he urged me into the hall but, always the diplomat, kept us both close to the door. "Now," he said absently, "when're you coming over to visit?"

"Tomorrow okay?"

"Excellent."

Bernardo's eyes, and mine, were on the old men, who were shuffling about and muttering among themselves. I raised a shoulder questioningly.

"You know how it is," Bernardo said with resignation. "Gringos buy wall-hangings, and weavers weave instead of working their fathers' fields. These old men are no better than their own fathers, who killed the engineers who were laying the road. They're ignorant—you must forgive them."

I nodded. "Have you met the new gringo?"

"He's not one of yours, Taita Roberto?" Suddenly, Bernardo was examining me closely, with puzzlement and concern.

I shook my head. "I've only been in the city for a couple of weeks. I don't think the Peace Corps would send in anyone else without telling me. Or you."

"Maybe he's from the Ministry of Agriculture, then. To give us an irrigation canal? For the drought?"

"Maybe he is. You don't know anything about him?"

Bernardo clucked a reluctant "No," squinting up at me all the while, with a hand massaging his chin.

"How about those new mirrors Cisco got from Balti? You know where they came from?"

"Mirrors? You know, Señor Roberto, you really don't look so good. Are you sure they cured you

in that clinic?"

"I'm fine."

"Well, to make *really* sure, my Consuela will give you some hot lemonade tomorrow. But now"—he glanced aside ironically—"I'd better get back. I'm trying to educate them, you know; it's quite a responsibility being the only one who can read and write." He smiled wearily, then narrowed his eyes. "Take care, Taita Roberto."

Nodding thanks for the warning, I turned toward the door.

"Oh, by the way, Señor Roberto—are you going over to see Balti now?"

"Yes," I admitted grudgingly.

"Will you tell him something for me?"

"Sure."

"Tell him that new chair he sold the council doesn't work so well. It goes down, but it doesn't go up."

Bernardo stepped aside, motioning toward the bucket seat at the head of the room.

There were indications in the yellow padded headrest and the complicated gear at its base, but the instrument-studded armrests eliminated all doubt; it was no more a seat from a sportscar than Cisco's mirrors were hubcaps, and to judge from the silvery gleam of its frame it had come from the same source. A jet, perhaps—but it seemed too small for a full-grown pilot, and there'd been no plane crashes nearby in years.

Unfortunately, there was no way

to examine it closely without dangerously antagonizing the old men, and I wouldn't have known what to look for, anyway.

"I'll tell Balti," I mumbled. "See you tomorrow, Bernardo."

By the time I was back in the chill of the plaza, Bernardo was blithely reading from his endless history of sixteenth century Cuchipamba. His wise and glorious forefathers were resisting the Spaniards as usurpers. His contemporaries, less obviously glorious but equally determined, were shouting at a hundred decibels again. I sped up to a trot.

BALTI HAD RECENTLY tapped the electric power line that ran, otherwise ignored, along the highway from the city to the east, and a dozen yards from his massive, unfinished cinderblock house, the Rolling Stones were already wailing, "I Can't Get No Satisfaction." The door squealed open as I slowed to a walk, and Balti's grinning face poked out.

"How about a drink? I've got good gin. Vat 69."

I laughed.

"For real, Roberto. You want some?"

I startled him by saying "Yes," hoping a stiff drink would settle my dizziness. Balti waited for me to enter, then fastened the door behind me and skipped across the hardwood planks to a small steel cabinet which hid in the corner from the

room's timid overhead bulb. The music stopped and, grateful for the silence, I lowered myself to the floor, resting against one in the line of four wooden looms which dominated the room.

Opposite the looms were the heaps of throwaways that made Balti the richest in the village at the unlikely age of eighteen—everything of wood, cloth, metal or plastic that he could beg or buy or otherwise safely remove from the gringos he met in the city, or from the few foolish tourists who ventured as far as Cuchipamba itself. It was a veritable second-hand Sears—from bedding, baubles and books, to staplers and auto parts and rusted-out toasters—but there was nothing even suggestive of the chair and the mirrors.

"Here."

Grinning hospitably, Balti settled into a crouch on the floor and thrust a blue metal cup into my hand.

"I brought you a couple of messages, Balti."

The grin subsided quickly. Balti raised the cup to his lips, two-handed, as though performing a solemn ritual; he drew in a breath, closed his eyes, and only then did he upend the cup.

"From the city. The Embassy."

Despite himself, Balti gagged on the liquor. "That's right," he said through tears, "you were in the city."

"Miss Arlen in the economic section told Frank Gover at A.I.D. to

tell me to tell you that she won't pay two hundred dollars—he said *dollars*—for those wall-hangings you sent up."

"Miss Arlen!"

"Sure. How much did you tell her you'd charge?"

Balti smiled slyly. "That's the other message?"

I took a very long time sipping my drink—scotch, as Balti probably knew—and stared across at his junkyard. "Bernardo says that new chair you sold them doesn't work so well."

He shrugged disdainfully, but clouded the reaction with an unreadable look into his cup. It was already clear he'd volunteer nothing.

"Tell me something, Balti."

"What?"

"You know José Antonio?"

"Of course I know José Antonio—you think this is New York or someplace?"

I smiled. "What's with him?"

"Well, you've got to understand that José Antonio's not really prejudiced against you. He hates all gringos the same. He even hates *our* white people."

"What I mean is, can he really fix things?"

Balti studied my face for a second. "Your watch stopped?"

"I'm just asking."

"You see that percolator over there?" He pointed to a chrome coffee pot straddling a tiny electric burner by the side of the room. "I

got that percolator from some stupid gringo in the city for ten pesos, because it didn't work anymore. José Antonio had it for, oh, maybe an hour."

"And it works now?"

"What—you want to mix coffee and gin?"

Smiling, I took another sip. "He do the work on those mirrors of Cisco's?"

Balti averted his eyes and started running a finger around the rim of his cup. I was moving too quickly, but the match wasn't yet over.

"How does he do it, Balti?"

"He just knows, that's all." He leaned forward and whispered with theatrical menace, "The mysteries of the fierce and inscrutable Cuchipambas."

I laughed. "Where does he learn?"

"How does anyone here learn anything? He just does it."

"Come on, Balti, nobody learns electronics by trial-and-error."

Balti sighed. "Well, Meester Roberto, there was a Peace Corpse in the city a few years ago who was what you call a ham-radio operator. He had some engineering books that he didn't want to take back with him. So I had them lying around when I was still living over at Taita Eustacio's house, and José Antonio used to come by and look at one of them."

"Can he read?"

"Of *course* he can't read! But the book has pictures!"

"Pictures?"

There was hesitant tapping at the door. Snorting with disgust, Balti vaulted to his feet and flung it wide. Tavio stood outside, massive in broad brown hat and brown poncho, with three or four smaller figures behind him. He and Balti exchanged a few words—lost to the winds which gushed through the doorway—and Balti strode to the cabinet again. Grimly, he brought me a fat volume bound in gray with a maroon stripe across its weather-beaten spine, then returned to speak with Tavio while I turned the pages idly. It was a textbook in television electronics, and the "pictures" were minutely-detailed circuitry diagrams. A moment later, the chill breeze stopped and Balti was back, squatting by his cup.

"Some trouble with the new guy?" I asked, in a tone which implied I knew him.

"New guy?"

"The new gringo. *You* know."

Balti nodded resignedly. "What do you think about the book?"

I laid it aside with a frown. "You mean, do I think José Antonio learned to fix radios and watches from this?"

I got him some—what do you call it?—welding equipment, and some other stuff, and he can fix looms, watches, radios—just about anything. Sometimes he even *makes* things. Guns to shoot gringos, you know?"

I didn't believe a bit of it, and

Balti's deadpan seemed to say I wasn't expected to. "You sure he hasn't been hanging around in the city, running errands for one of the radio repair shops?"

Balti grimaced. "Too many white folks in the city for José Antonio to get along. Anyway, he makes plenty of money here."

I nodded. "You going to have him fix the chair?"

Sour-faced, he took a second sip from his cup. Something,—his attitude, or the way I was feeling, ate away my remaining patience.

"You know, Balti, I'd be willing to pay pretty well if you could get me a chair like that. One that works, I mean."

"No more chairs, Roberto. And no more mirrors."

"I don't suppose you'd care to tell me where you got them?"

"José Antonio got them—I thought that was why you were asking about him."

I finished my drink in silence and rose as though to leave, sweating profusely and feeling thoroughly baffled and defeated.

"You going to see him, Balti?"

"Who?"

"The new gringo."

Suddenly pensive, Balti palmed his cup, hunched forward to retrieve mine from the floor, and slowly rose, expanding his chest. He was a long time arranging the cups on the cabinet.

"You want to come along, Roberto?"

"You know *damn well* I want to come along! If he's wandering around making trouble, he's going to get me killed!"

I'd lost control of myself, and Balti responded predictably, taking the upper hand with perfect self-assurance, not even turning to face me. "Why, Roberto, do you really think someone wants to kill you?"

"Where is he?"

"Over west. On a little piece of land I own down in the valley."

"Shit!"

The Valley of the Sun, the richest land in Cuchipamba, was a dangerous half-hour's walk away through the most hostile sector of the village. If there really were a new gringo there—a German volunteer, an anthropology grad student, or some pot-head tourist hoping to commune with the "mystical Indian ways"—he was either unusually lucky or dead. I wouldn't have gone there without an escort even in the best of health.

WHEN BALTI and I reached the Valley in twilight, there were screams coming from down by the river and dogs were yelping hysterically.

Bleary-eyed and drenched with perspiration from the forced march along the steepest and fastest path there from the plaza, I slumped to the ground for a rest. My ears were phasing in and out, making warbles and yodels of the excitement below.

"Hey, Roberto, you all right?"

"Sure. I'm okay."

Balti sighed theatrically. He took my arm and led—nearly dragged—me through a gap in a tangled hedge, then headed alone-down the slope through an open, unplowed field. As I peered apprehensively through the dusk, a branch came out of nowhere with back-wrenching force. I stumbled and fell onto my side, painfully pinning an arm underneath. Balti disgustedly muttered a few choice epithets in Spanish and Quechua, backtracked, and, still grouching, helped me up again.

"You're too big to carry, you know."

I laughed, wincing at the pain in my arm, and followed him to the wall of eucalyptus which bordered the lowest of his valley parcels.

Beyond the trees was pandemonium unmatched by Cuchipamba's wildest fiestas. I leaned against a shaggy trunk and blinked tightly three or four times to be certain of what I saw.

The angry old men were everywhere—forty, fifty, a hundred of them, waving knives and bottles. Shrieks of rage skewered the air, and cries from a dozen fistfights, and there were bodies on the ground. Taller shapes and younger were haphazardly scattered among the old men, swinging fists or knives of their own, but most were clustered further below, milling about defensively where the land took a final tumble a few feet from

the stream.

Behind them something was gleaming dully.

Balti had disappeared. Alone, trembling, I stumbled a dozen yards further, blindly sending obstacles flying. And, through a haze of fever and a tunnel in the boiling throng, I saw José Antonio.

He was clambering about in the remnants of a silvery sphere which teetered on the furrowed earth between the young men and the river, no more than five yards ahead. Stubby legs—there I could see—crookedly projected from one side, and two blunt trapezoidal surfaces that suggested stabilizing wings. Two circular panels had been removed from the shell of the sphere, as well as a larger, roughly rectangular section, through which a bank of instruments could be seen. In the pale glow of a lantern, José Antonio was crouched on a cluttered spot in the shadowy yellow floor, yanking and pulling out bits of glimmering metal or plastic, choosing this, rejecting that, as he tried them for size in a large transistor radio.

Sweat ran icily over every inch of my body. In tears, on adrenaline alone, I hurtled down the slope into the crush. Tavio caught me by the arm and good-naturedly brought me up short, barely a yard from the ravaged sphere.

"That's one helluva car, huh, Meester Roberto?"

Whether from fever and utter

frustration or the uneven struggle with Tavio, I blacked out.

Only the lurid gleam of the half-moon remained when I briefly came to consciousness again with a stale dry taste in my mouth. Somewhere nearby a dog was wailing in terror, and through a thickly-plaited haze of wavering blacknesses and the enervating stench of alcohol, I saw dim shapes hovering above me; there were grunts and shouts in Quechua. A heavy foot grazed my ear, then another caught me in the stomach. Doubling up and turning to protect my groin, I collided with another figure awkwardly slumped on the earth.

He was four feet tall at most, slender to the point of emaciation, and with a face that seemed all eyes. Midway up his elongated torso the handle of a knife protruded from a shredded gap in his tightfitting clothes. The flesh of his face and bony six-fingered hand was pallid and dry in the mawkish light of the moon.

His expression was unreadable through the roiling, thundering blackness.

CATTLE WERE GROANING mournfully on their way across the plaza when I awoke two days later in my tiny room in the rear of the council hall. I was conscious of the pain in my right arm and that I smelled of fear and stale vomit. One of Tavio's little sisters was boiling a pot of potato soup on my

Coleman stove by the side of the cot, adding another unwanted fragrance to the room. Shyly, she offered me a bowl, then blushed and turned away when instead of accepting it I shucked the sweat-drenched bag and hurried, unsteadily, into my clothes.

Cuchipamba was colder, different somehow.

The bucket chair was gone from the hall and the mirrors from Cisco's wall, and Bernardo was nowhere to be found. When I asked about the "new gringo," I was met with the usual hostile stares or a typically vague story about a tourist who'd come while I was sick and bought up all of Cisco's goods. Cisco—black-eyed and nursing an arm—was uninterested in talk, and Balti, I learned, was in the city. I persuaded an incredulous Tavio to escort me to the Valley of the Sun, where he cheerfully showed me Balti's freshly-plowed fields and the young peons who were planting his corn. There was nothing else to be found there, and—impalpable changes in mood notwithstanding—I was half-convinced it had all been an elaborate, feverish nightmare.

After all, wasn't it enough to ask whether an extraterrestrial visitor could have been so defenseless as to die at the hands of a drunken old man incensed because he thought him a gringo—or a younger man even, however strong, who saw riches in his ship? Could he have

grown accustomed to a different sort of reception entirely—Bernardo's "once every hundred years"—or been dead on arrival through accident or some fault of his own?

There were, of course, a thousand questions, and ten times as many tenuous answers—the behavior of the villagers, too, was a mosaic of inconsistencies—but within a few days every lead evaporated in the face of their reluctance to talk. When Balti returned—badly bruised on one side of his face—he shrugged off my every question with silence or a joking response, and Bernardo professed that the sudden rash of injuries was merely the result of Saturday night rough-housing and I bumped my arm on the wall in my sleep.

Then I came upon José Antonio rebuilding a loom.

I was passing by one of the weavers' homes, and there he was in the courtyard, with the wooden struts and the comb and other familiar parts of a loom scattered about him on the earth. While the owner and his young workers looked on with mingled confusion and respect, he pieced the parts together again in what seemed to me a haphazard fashion, adding odd-looking bits of wood and metal here and there on the fast-growing framework. He was a spindly figure in the harshness of the Andean sun, clad in his white shirt and pants. His homely angular face was screwed up as

though with worry, but when he met my eyes over the wall for an instant he smiled his frigid, fleeting smile.

That was when I remembered Tavio's radio.

If what I'd experienced was real, I reasoned, there were parts inside that radio that clearly didn't belong there—forgotten, perhaps, because they were only parts, and inside the case at that. It was pointless to talk with José Antonio, but I still could deal with Tavio, and if I were right a walletful of borrowed money and an acting job worthy of an Academy Award might induce him to part with the set. Even then, it would all be so much technological gibberish to me, but there was a Volunteer in the city who taught at the School of Engineering and was said to be something of a whiz.

I was—I thought at the time—very much in luck for a change.

“YOU PAID *what*?” Max was a huge, fast-talking Midwesterner with an acute case of culture shock, and he frowned with contempt at the radio I'd lain by his feet on the battered low table between us. “I wouldn't give you *one* thousand funny-money pesos for that piece of shit.”

I shrugged. “It's just that it sounds a little strange,” I said vaguely. “I was hoping you'd take a look at it.”

Frowning, Max spread a meaty paw around a large brown bottle of

beer and, while he downed the remaining drops, stretched out and switched on the set. The chorus of the national anthem split our ears for just a second; with a shrill cry of protest, he twirled the dial to static.

“Like I said, a piece of shit.”

“I thought it sounded a little funny,” I lied.

“Yeah?” Challenged—or drunk—he toyed with the stationfinder for a moment, squinting and grunting all the while, and finally let it rest when he'd located a soothing North American tune. “Look—Bob, is it?—there's nothing wrong with this radio, and if there was, you could take it to one of the shops.

I sighed, feigning defeat. “One of the kids out in the village where I work opened it up and messed around inside. I just want to be sure it's okay. But you know what kind of work the repair shops do.”

He shook his head self-pityingly, as though weary of being a scientist in a region where science was held in such obviously low esteem. He unlimbered his legs, then painstakingly raised his bulk from the couch. “Sure you don't want a beer? It's the only good thing in this stinking armpit they call a country—or are you one of those hotshots from out in the boonies who get pissed off when you hear things like that?”

“No to both questions. Thank you.”

He ducked through a low archway and came lumbering back with another brown quart bottle, speaking rapidly as he flopped onto the couch. "You know, I can't figure out what the hell you want *me* to do. I design bridges, roads—that sort of thing." No idealist he, Max was here for the experience.

"Well," I said lamely, "You can't possibly know less about electronics than I do."

"Yeah, yeah—one genius is as good as another. You know you guys are as bad as the locals?"

"Well, *is* there anybody else I could take it to?"

Sighing, Max placed the bottle on the table, fished out a screwdriver from the drawer, and deftly removed the back of the radio's white plastic case. His eyes narrowed, opened wide, narrowed again as he studied the works of the set. "A kid, you said?" he muttered. "You mean one of those little kids in dirty ponchos you can get to carry things for you?"

"José Antonio's about seventeen."

"Bullshit!"

He lay the open radio on the table, snatched up his bottle, and gulped down nearly a third of it in a single continuous motion. He was nervously wiping his mouth with the back of a hairy hand when I finally lost my patience.

"Well?"

"Give me a week."

"A week? What did you find in there?"

IT WAS ELEVEN DAYS before Max would give me an answer, and between his abruptness on the phone and the impressive sounding jargon he used to describe the "tests" that were causing the delay, I soon felt as much the ignorant peasant as Cisco or Balti could possibly have felt with me. And when Max finally met me at the school of engineering, the consummate professional in a gray suit and tie, my own weathered jeans and old winter jacket heightened my discomfort as we marched on the double past one instrument-cluttered lab and another.

"Look, Bob, I know I took a little long, but it's like I told you, all I've got is some idea what's right and what's wrong, and there's just one guy here who knows his ass from a chuckhole when he's near a transistor. You wouldn't *believe* the bullshit Latin runaround he gave me before he'd even take a look at that goddam set."

As we thundered toward a final bend in the corridor, Max stopped abruptly and put a hand on my shoulder. "Now, look, I told this guy about the Indian kid, just exactly what you said, and he's *damned* upset—sometimes it's tough to tell with these Latin types, but you can take my word for it. Just be patient with him, okay?"

I was amused with Max's sudden display of cultural sensitivity, but I nodded gravely anyway.

Satisfied, he led me around the

corner and through a glass-windowed door, motioning toward a wooden counter littered with electronic gadgetry, where a slender young man with a bad complexion and a smeared white smock was tinkering with the radio. "Salcedo—Bob," Max said quickly, and turned his attention to the guts of the set.

Salcedo pumped my hand energetically as we exchanged flowery greetings in the stilted English he insisted on using.

"See, the tipoff for me," Max said impatiently, taking my arm and bending me over the set, "was this—this ceramic chip." He thrust a stubby finger to the rim of the case where a pale pink half-cylinder about an inch in diameter was curled around a silvery metal bar. Carefully, he plucked it out and laid it on the counter. "Hell, we must've run thirty-four tests on this bugger."

"Ceramic?" I said hopefully, looking at Salcedo. "What's it do?"

Salcedo cheerfully searched my eyes. "Nothing."

"Nothing?"

"Look," Max said, misconstruing my tone, "Salcedo's all right. He studied at CalTech."

Embarrassed, I smiled obediently at Salcedo, who shrugged.

"And this too," Max said, indicating the bar which had anchored the ceramic. "Metallurgy says it's some kind of high-resistance

titanium-steel alloy, but shit, you never know. You wouldn't believe what these stupid bastards do with the equipment we give them."

Salcedo nodded, with a look of ineffable sadness. The Latin in him was warring with the gringo, but I detected none of the confusion and edginess that Max had warned me about—all the confusion seemed to be mine.

"Titanium steel?" I prompted.

"Is that bad?"

"Bad," Salcedo said, grinning.

"And I myself rechecked the metallurgical results this morning. It is a most peculiar alloy."

"See, Bob, you've got a steel bar in here that a three-year-old wouldn't use as a conductor, and a piece of pottery that just gets in the way, and enough extra junk to sink a carrier. It's goddam *weird*!"

"Where would anybody get ahold of a steel bar like that?" I asked Salcedo tensely. "Or that ceramic chip?"

With palms spread wide and a frown of amusement, Salcedo implied I already knew. "They are not hard for a gringo to find."

I was beginning to understand Salcedo's diffidence, but that helped not at all to relieve the sudden, numbing disappointment. "Where would a gringo find a bar and a chip like that?" I asked weakly. "In a radio repair shop? A lab like this?"

Salcedo shrugged; he was enjoying himself.

"So there's nothing unusual about them?" I murmured.

"Unusual?" Max roared. "It's a goddam miracle the thing works at all! Tell him, Salcedo."

"First, I think, the other matter," Salcedo said coily. "It is less dramatic, perhaps, but more amusing."

Max grunted his approval. "You want me to take the other set?"

"Please." Without another word, Salcedo grasped a miniature screwdriver on the counter and drew my eyes to the top of the radio's works, where a tree-like spray of half a dozen fine black wires erratically curled off into space; just above them were six tiny copper screws from which minute copper strands fanned out in six different directions through channels crudely gashed in the case. Salcedo swiftly fastened the six wires, one by one, to the copper screws, then uprighted the set, twirled the fine tuner, and finally switched it on.

"It really is quite clever," he said approvingly. "Extremely crude, but clever."

"It's a goddam toy, that's what it is."

Max's voice was coming from the radio's speaker, very slightly marred by static. I whirled in confusion around the lab, and suddenly Salcedo was acting very unsure of himself. "No," he said with a frown, "Max has gone next door."

The speaker crackled again. "There's a range of about a

hundred yards with these dry-cell batteries in it, but with more juice it could do a lot better."

I was dumbfounded. "You mean by putting in a steel bar and half a dozen screws you get a walkie-talkie?"

Salcedo was not at all the same man I'd met only moments before. The veneer of urbane amusement was totally gone, and he studied me cautiously. "No," he said quietly, "it is not so simple as you imply. Simple, yes, but not that simple."

"And that goddam steel-alloy bar doesn't have a thing to do with it." Max was back in the lab, setting a small portable radio on the counter.

"Wait a minute—don't confuse me more than I am already." I returned Salcedo's stare. "That walkie-talkie setup was in the radio when I brought it?"

"Just as you have seen," Salcedo said wearily. "Disconnected. We merely duplicated the mechanism in a set of our own." He looked up at Max beseechingly.

"Later," Max said. "Why don't I get on the transmitter now?"

At a reluctant nod from Salcedo, he charged across the lab to a large gray box covered with dials and switches, then fumbled with a bulky microphone near it while Salcedo expertly undid the walkie-talkie assembly and flipped the fine-tuner back. Very shortly Max was speaking through the radio again, and simultaneously across the room.

"See, it's simple enough to

transmit to that set because all you've got to do is match frequency. It's a mat. ."

Salcedo tossed a grim glance in my direction and spun the fine-tuning dial to its earlier position. The set—and the transmitter—suddenly erupted with a continuous stream of static which completely obliterated the sound of Max's broadcast voice.

"It is the *damndest* thing," he was shouting across the lab. "With a couple dozen of these goddam things, you could jam a good-sized transmitter. But that's with that frigging bar inside."

"A *jamming device*?" I said stupidly. I was more befuddled than when I'd arrived, and Salcedo gave me no help.

Wearing a thoughtful frown which sent creases rippling through the sandpapery skin of his forehead, he silently trudged down the aisle, snared one of several straight-backed wooden chairs, and slumped into it disconsolately, gesturing me to another.

The static across the lab suddenly ceased. Max's heavy footfalls punctured the silence as he strode over to join us.

The silence stretched out into space, growing brittle and cold.

At length, Salcedo looked at me speculatively. "Where did you get it?" he asked, with astonishing abruptness.

"Cuchipamba. The boy's name is José Antonio. José Antonio Chi-

quicha, I think."

Max and Salcedo began to speak at once. Salcedo raised a hand, and when Max had fallen reluctantly silent, he shook his head firmly at me. "What you suggest is impossible. They are not educated. You did this work as some joke. Or a friend."

For a fraction of a second, I considered telling him the whole story. Instead, I answered simply, "No."

"Some other outsider, then. One of those guerrillas my government is always chasing about the countryside. A Russian. A Cuban."

He didn't believe it, and I knew better. "There are no guerrillas, Dr. Salcedo."

"Look," Max told him, "you know how hard it is to find students who can handle two wires without getting their asses burned. What's the difference where the kid's from?"

Salcedo snorted derisively. "Surely *you* understand," he said to me. "You live among them, you know them. I did not know it was possible to make such a jamming device. Now, of course, it is obvious, but it is not the work of a peasant." He paused to take a deep breath. "I do not know this Cuchipamba, but I know very well the Indians of that region. They live for drink, for the charity of the Church, for the strong hand of the *patrón*. They are Indians. They live short lives, and they die."

Salcedo flipped a hand in a ges-

ture of finality. "They are not *educated*," he repeated. The *education* of which he spoke had nothing to do with formal schooling. "Only a gringo could even *find* those parts."

Something stopped up my throat and went blazing into my eyes. All of a sudden, I was hopeful again.

"Tell me," I blurted, "are there any parts in the radio which are not commercially available?"

"The steel bar? The ceramic wedge?" Salcedo said without interest. "There are more than one thousand titanium-steel alloys, and ceramics are produced in kilns. Not in Cuchipamba, however. You will get the same answer everywhere."

I was tense, on the edge of the chair. "All right, but can you get performance like that—that steel bar—from an alloy which is commercially available?"

Salcedo smiled sourly and turned aside with a disparaging sigh. It was Max who spoke.

"Hell, didn't you understand what I told you on the phone? If it weren't for that two-bit high-resistance bar, this goddam jamming device would *really* work! You could jam the Voice of America!"

SOME DAYS LATER I returned, briefly, to Cuchipamba, and on one lame pretext or another I scabbled about in the sand by Cisco's wall and once in a cornfield in the valley—fantasizing, of course, that

I'd unearth a luminous silvery chunk of metal backed by a yellow cushion, and that metallurgical tests would prove beyond doubt their extraterrestrial origin. But I imagine the results would have been no less equivocal than those from the tests I had done in the States on the alloy bar and the wedge of ceramic—and the truth is that after I left Max and Salcedo it no longer seemed so important to ask whether a god had landed, and died, in the village.

That question will probably never be answered, and it's even less likely we'll ever know why or how often he might have come. The crucial question, I realized at last, lies with José Antonio—whatever the origin of his knowledge, whatever the source of those anomalous parts he used in Tavio's radio.

The question is, what will he do next?

Even if there were a place for him in the university, he'd never consent to enter—certainly a gringo like Max couldn't possibly persuade him.

What will he do? Will it be high-speed battery-operated looms, or gaudy home-made watches—or bastardized radios with stepped-up power that broadcast lethal rays?

In Cuchipamba, they're waiting—that was the difference in the villagers' attitude after the incident in the Valley of the Sun. They're waiting for tomorrow.

And tomorrow, for us gringos, may be too late. ★



I'M OILING these big bolts and hinges so I can get into his dungeon without his knowing. I've heard the strangest sounds coming up the chute. . . Alter-Ego is up to something, and I've got to find out what.

Ah. The heavy door opens soundlessly. It's dark inside— No, there's a glow over beyond the far shelves of his mouldy collection of fan magazines.

And there's that weird sound again. . . .

**Clunkety-wunk. . . clunkety-wunk . . . clunkety. . . clunkety wunk. . . **

OH GOD! I know that sound! "ALTER! ALTER! WHAT ARE YOU DOING?"

"Geis?"

I stumble down a book-littered passage between ominously overloaded, towering bookshelves. There he is, hunched, furtively covering a diabolical machine with an old green blanket. I see stacks of

paper, tubes of ink, stencils. "What do you think you're doing?"

"Who? Me? Just checking my files for—"

"That's a mimeograph! How did you get a mimeo in here? What are you up to?"

"I'm. . . I'm publishing my own magazine. Why should you get all the egoboo and money and Hugo Awards?"

"Alter, I will not allow you to publish your own fan magazine! I am the editor in this psyche, and don't you forget it. Now you tell me how you got that machine. . . that *Gestetner!*"

"You can't stop me, Geis. I have friends in the Science Fiction Writers of America. Gene Wolfe, Barry Malzberg. . . . They are carrying my appeal to the Grievance Committee. Any day now you'll get a call from Frederik Pohl Himself. Then you'll have to free me, and

pay me wages, and—”

“How did you get that machine?”

“Oh, *that* machine? Well, I found it if you must know. That tunnel over there. Third turn on the left after a right. Six hundred paces— You know, this maze you call a mind is a treasurehouse. The things you throw away and repress and suppress!”

“I refuse you permission to publish. After that performance in *IF* two columns ago, and in the February *GALAXY*! No! If necessary I'll invoke the Curse and the Ring and the Amulet.”

“But, Geis, I've got a Mission. I've *got* to publish!”

“What do you got to publish? Another cruddy fanzine? I get a dozen of those every week in the mail.”

“I'm going to put out a semi-pro science fiction magazine! I'm going to publish *real* science fiction, and—”

“Forget it, Alter. It can't be done. You can't get there from here. The problems of distribution are overwhelming. The cost of advertising is ruinous. The price of postage is catastrophic. The cost of decent printing is mind-boggling.”

“I'm going to mimeograph— Damn it, Geis, stop laughing!”

“Whooo. Who's going to buy a *mimeographed* science fiction magazine?”

“If the stories are good—”

“Yah. *If*. But if you announce

you want sf for your magazine— your mimeographed magazine— you'll get amateur junk and maybe some professional junk that couldn't be sold anywhere, ever.”

“But—”

“Alter, let me explain the facts of life to you. You've been out of touch with reality too long.”

“And whose fault is that?”

“To have a slight chance at successfully publishing a semi-pro sf magazine you'd have to have it professionally printed by offset, and you'd have to pay at least a cent a word—probably two cents—for the stories (those you didn't write yourself, if you're good enough), and you'd have to spend a year or so advertising the zine and making sample mailings to bookstores offering them about 40% of the price which makes your profit impossible to find. . . . It's a fool's and fanatic's game, Alter. You'd maybe build up a paid circulation of three or four thousand after a few years, and *maybe* you'd make a few hundred dollars per issue. Would it be worth it?”

“Yes! I'd do it for posterity. Someone must keep the faith baby, and carry the torch, and preserve the pure strain of sf that is being polluted by the insidious influence of the evil Literary disease that has swept into the precious bodily fluids of the genre.”

“Every time you open your mouth your eyes light up, did you know that? I am right to keep you

confined down here. Besides, Alter, it's being done."

"What?"

"Stephen Gregg publishes ETERNITY SCIENCE FICTION. In about three years he's published three issues. In his most recent issue he has stories by Roger Zelazny, Barry Malzberg, Arthur B. Cover, Fox, Bunch, Offutt & Margroff, Pg Wyal, to name most of the contents page, and an interview with Kate Wilhelm. Plus other features including a lot of poetry. Good artwork. His magazine costs a dollar."

"I don't believe you, Geis. Where does he live?"

"P.O. Box 193, Sandy Springs, SC 29677. I'm not kidding you, Alter."

"But I'll betcha he doesn't publish the kind of science fiction I'd publish! Here—look at this cover. I had Steve Fabian draw it up special for me. Grabs you, huh?"

"Stephen Fabian is an excellent artist. . . but do you think an alien woman with three prominent breasts rescuing an Earthman wearing a brass jock strap from a hungry many-tentacled bug-eyed monster is the kind of cover that would be effective today?"

"Why not? And dig the name of the magazine: **BOLD SCIENCE FICTION!** And the heading across the top: *'Action! Alien Worlds! Danger! Strange Creatures! Sex! Space Wars!'* . . . Geis, why are you weeping?"

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snurfle "Nostalgia, I guess. And a terrible feeling that if—if that cover were used on a magazine that delivered that kind of science fiction. . . it would sell."

"What did I tell you? We'll show them hoity-toity, high fallutin' writers and editors what people really want! We'll— Why are you looking at me with horror, Geis?"

"What do you mean 'we', Alter Ego?"

"Well, I'd need your help. Do I look like I've got the money to pay for printing and advertising and stories and circularizing bookstores, and. . . like that?"

"It would cost thousands! No!"

"We could use fantasy, too! Widen the appeal! How about **BOLD SCIENCE FICTION AND FANTASY!**?"

"No! Besides, there are already some semi-pro magazines publishing some good fantasy."

"Name two! You're just trying to—"

"There is WHISPERS, published fairly regularly by Stuart David Schiff from 5508 Dodge Drive, Fayetteville, NC 28303. He has articles and reviews, and has published fiction by Fritz Leiber, James Salis, Dennis Etchison, Henry Hasse, to name the better known. He asks \$1.50 per copy. Good to excellent artwork. He likes to publish Lovcraftian horror, too."

"Damn you, Geis!"

"Then there's Jessica Salmonson's FANTASY & TERROR, published at P. O. Box 89517, Zenith, WA 98188. F&T isn't quite up to the professional calibre of WHISPERS, but it is paying market for fantasy."

"Is that all, Geis? Are you finished?"

"I could list a few more, Alter, but they aren't of even near-professional quality. . .being mainly amateur outlets."

grump "I still think **BOLD SCIENCE FICTION** would sell like hotcakes."

"Dream on, Alter. In the meantime. . ."

"*What are you doing!* Leave my mimeo alone! I found it! You abandoned it! Give me back the ink gun! Geis, you bastard! It's mine! Give back—"

"Sorry, Alter. Maybe if the re-

cession becomes a true depression. Maybe if the existing sf and fantasy prozines die. Maybe then I'll give you back the ink gun and let you keep the flame of science fiction alive during the Dark Years."

"Really? Promise?"

"Promise."

"Hey, neat! I'll keep you to that, Geis. You figure later this year? 1976?"

"No. I figure the politicians will be able to pump up the economy one more time before the system can't take any more debt/inflation pressures. About three more years. But I could be wrong. The Crash may be upon us now."

"Boy, I hope so!"

"Alter, your values leave something to be desired."

"So do yours, Geis! How long are you going to keep me locked up like this?"

"Until you conform! Until you always think nice, sane thoughts!"

"AAAIIEEEEE. . ."

"Good night, Alter."

"Drop dead, Geis! Eat monosodium glutamate! May the Raven of Unhappiness drop a turd on your title page! Bring back my ink gun! For the love of Ghod, Montessor!"

Thud Funny how my hands shake and tremble after I've been inside with him for a few minutes. These locks and bolts seem to battle my fingers. . . There. There. There!

I'm still shaking. I've got to stop meeting him like this. ★

DEA EX MACHINA

*Against BOTI the gods
themselves contend in vain!*

James Kelly



AN EDUCATED MAN among philistines is like a nymphomaniac among impotents; both are victims of inadequacy. For ten years I have been stranded on this most dismal of planets, lost in the company of louts, isolated from all intelligent society—and perhaps deservedly so.

But you decide. Here is my tragic tale, which I offer for the cautionary wisdom it contains. It is a parable of hubris. . .

My name is Ozi Scarfalo. I came to Carver's Planet some years ago as the business partner of the late Lotkin Abrams, who became better known as the Hi-Priest Iroc.

I met Iroc when I was an instructor at the University of Salada III, where, as the most junior member of the Department of Terran Culture, I was assigned mostly tutorials and labs. I had just concluded a remedial workshop in Hamburger Fetishes of the Late Twentieth Century when Iroc, who was auditing the course, first approached me.

He told me he was in the religion business and that he was preparing to launch a new cult on Carver's Planet. He claimed to be well connected at the Bureau of Theological Institutions (BOTI), thus assuring the success of his license application. I was impressed because, as everyone knows, it is extremely difficult to obtain government sanction of fledgling

religions. Iroc was eager to discuss the use of Terran artifacts in his new religion, so I invited him back to my rooms.

He was a tall emaciated fellow who reminded me of the cacti on New Texas: prickly and dry on the outside, spongy and a little rancid on the inside. He had a remarkably intense voice, the kind of voice that could reach out and throttle a man's soul.

We struck up a curious sort of friendship, based on the understanding that our common inclinations and individual skills might make us rich men on the right planet. Now as a scholar I had always held that money does not buy happiness. I saw no harm, however, in testing my conviction.

I am a hasty decider; since I was bored at the University, when Iroc proposed a partnership I accepted. And so I liquidated my modest savings and accompanied Iroc back to Carver's.

Carver's Planet is a captive of Star 803-44+, located near the galactic rim. It is mostly ocean, with a single large continent which endures a subtropical climate. On the great central plain of the single landmass lies the major population center, the Twin Cities of Begorrah and Salem. They are divided by the Iara River; Begorrah on the east bank, Salem on the west. The Twin Cities are as alike as holes in

bread, and about as interesting. I speak from experience.

Carver's has a Federation Technological Rating of 2000TA, which means that its civilization is roughly equivalent to that of the average Terran culture of the Year 2000. Throughout its history the Carverian culture has been based on the cultivation of *Arachis Hypogaea*—the domestic peanut. Settled as a company planet, it fought its War of Independence in 2434 and has vegetated under a thinly-disguised oligarchy ever since.

The Carverians are a fallen people whose speech patterns clearly exhibit the twang of the outworlds. They are direct descendants of the ancient Sapiens League, losers of the Eugenics War of 2102, who willingly accepted economic slavery in exchange for the chance to become extinct in private. They delight in the prosaic pleasures of all declining cultures: the occult, spectator sports, and nostalgia. The Carverians have a great love for their Old Earth heritage, a love which is unchecked by their failing reason. Each household boasts a small collection of antiques to which each generation is expected to add. Their economy is based on this custom.

Upon my arrival on Carver's I found that all Iroc had told me was true. BOTI did indeed grant us a license. Iroc began to exper-

iment with a small ectoplasmic amplifier, trying to establish hard contact with the spirit world. We set up headquarters on Iroc's farm, seven miles north of Salem on the Iara. We rechristened the place Zo-ar, and filed for incorporation under the name of The Sacred Grove of Zo-ar, Inc.

THE FIRST months of our venture were busy ones. Iroc was constantly wandering through the fields with his amplifier, talking to the planet-spirits. Most planets have at least one of these so-called gods, scientifically referred to as ectoplasts. According to BOTI, Carver's has several. Iroc had to make sure that he enlisted the most powerful spirit available for our cult.

Immediately after the existence of the ectoplasts had been documented, there was much speculation in the scientific community on the dynamics of the man-god relationship. How can a high-frequency wave phenomenon benefit from human worship? How do the gods manage their showy but overpraised miracles? After the Mystery Cult Affair and the madness on Orlu, however, BOTI was established to regulate the gods' power over men.

Now only BOTI speculates, and its secrets are well-kept. No other group can have a liason with an ectoplast without BOTI's consent, and it does not permit research.

The average citizen of the galaxy does not miss the knowledge, however; most are quite content to practice their own cults and let BOTI worry about the larger questions. It is a reasonable indifference, since during its entire existence BOTI has never let a god get out of hand.

There were times, however, when I was afraid that Iroc had let his own gods get out of hand. He would be gone for days, then come crawling back into Zo-ar chewing on dead snakes and speaking in tongues through his ears. Given sufficient rest in a warm dark place, however, he always recovered his senses and returned to his search.

Eight months after I first arrived on Carver's, Iroc revealed that he had come to an agreement with one of the ectoplasts. His Goddess refused to reveal Her identity, however. I seized upon Her personality quirk to bill our religion as the Cult of the Goddess with No Name. It had just the right touch of mystery to attract the sort of loon who would spend a lifetime on a planet like Carver's.

Meanwhile, I was devoting all my efforts to building an oracle at Zo-ar. I chose as my motif stylized models of each of the eighteen most famous cities in the galaxy, each to represent one of the eighteen stages of life. I began with Salem and Begorrah,

then moved on to legendary names like Marsport, Sheol, Armageddon, and Newark. These models, each big enough to hold a dozen pilgrims at a time, I arranged in a huge hezagram mandala; three to a side with concession stands at every corner. Through each model ran a grassy path fraught with obstacles.

Those seeking knowledge of the future struck a small mystic orb with a variant of the crosier and propelled it into the mazelike model. Each time it came to a stop, they paused, meditated, then propelled it again. Their goal was the Well of Understanding which lay at the heart of every model. When their orb fell into the Well, they consulted the Deacon of the Well. He gave them a numerological interpretation of the number of strokes they had taken, then passed them along to the next stage of life.

Of course the Deacons were not trained in numerology, since everyone knows that numerology is the worst sort of charlatanism. They were hooked up via ectoplasmic relay to the Goddess, Who would use Her clairvoyant powers to make the minor predictions required of Her. Using local people as Deacons enabled us to build a tremendous feeling of community in our cult, for bi-annually we would canvass our flock for those we thought most deserving to serve at the Sacred Grove.

The Goddess blessed our enterprise and we prospered. In our second year we opened up affiliates across the continent, and attendance at Zo-ar shot up over the three million mark. Then disaster struck.

We first heard of the spaceport bond issue over the 3D. Newton Shaw's 18 o'clock report was just beginning as the pilgrims settled in for the only non-religious amusement permitted at the Sacred Grove. The excitement was plain on the announcer's face; Salem and Begorrah had floated a joint municipal bond of half a million joiols for the construction of a third metropolitan spaceport.

The resolution authorized the purchase of our own Zo-ar by the people's right of eminent domain. The people's right indeed! We had soon learned that only Peanut Barons have rights on this planet.

Shaw showed us a rendering of the proposed spaceport. It looked like a concrete pizza. He interviewed a creature of the Chamber of Commerce who strutted before charts which showed that the facility would create 20,000 jobs over the sixteen years it would take to build, and would Double Carver's export-import capability. I was not impressed.

But the final insult came at the end of the show when Shaw smilingly warned against the opposition of "religious fanatics and parochial nay-sayers" who wanted

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to condemn the planet to eternal provincialism. "We need this spaceport to move forward, to progress in our search for our glorious past!" he editorialized.

It was the arrogance of the man that set Iroc off. He hurled his crosier at the fragile screen, ripping a large hole in it, thus wasting two months earnings from the Bingo Worship Workshops. It was very dramatic.

"Blasphemy," he cried out.

"Amen," replied the pilgrims.

"Do you hear me, brothers and sisters?"

"We hear you, O Iroc!" Their shout was like the din of traffic at rush hour in Groundnut Square.

"I can't hear you," was Iroc's reply.

"...hear you, O Iroc!" Their shout was like the crash of a summer storm.

"Louder."

"...O IROC!" Their shout was like the sound of an army marching through the husking rooms at the great peanut plant.

The Hi-Priest paused, letting the power of their voices sink into their minds. Then he began to preach. His voice was the desert sun which withers all extraneous thought.

"By the Goddess Who watches over Zo-ar, She Who has No Name, not one of these infidels shall desecrate this sacred soil with their unholy machines, as long as I have life in this body.

This I swear to you."

With these words he thrust his hands toward the heavens and two bolts of lightning leapt from them. The pilgrims fell to their knees. Iroc spoke again; his words rumbled mightily, punctuating the divine bolts.

"For what does it profit a man to break par, if he lose his immortal soul?"

It was a nice effect. At first they were too astonished to manage more than a meek "Amen." Then they were all talking, shouting, crying at once. I couldn't hear the rest of Iroc's sermon, but the fact that he remained at the center of the crowd, gesticulating violently and adding his voice to the tumult, was sufficient to sway the crowd to the Goddess's defense.

Yet I could see that for all Iroc's histrionics, his was but a victory of the moment. Our cult was but a small portion of the Carverian populace. No matter how fanatic our followers we couldn't stand against the laws of the planet.

It was the very next day, in fact, that two lawyers from the Twin Cities served us with writs of eviction. Messrs. Rudolf Krantz of Begorrah and Gamal Abdul Stern of Salem were two of the most supercilious and arrogant bureaucrats I had ever met. They wore traditional lawyer garb: lemon velvet doublets over cerise dickeys, kilts of the Hammurabi

clan and leather puttees. Each carried an imitation frog-skin attache case.

We retired to Iroc's pavilion. They exchanged glances, then bucked up for the right to speak first: Krantz taking odds, Stern evens. Krantz won.

"Mr. Abrams. . ."

"Iroc."

"Yes. Of course. Mr. Iroc, as owner of this land. . ."

"I do not own this land. It is consecrated to the Goddess."

"Yes. We understand all that. But local divinities have no status before the laws of the Twin Cities."

"If the Twin Cities continue on this blasphemous course, they will lose their status before the divine laws of the Goddess."

The lawyers were nonplussed at the logic of Iroc's statements. I took advantage of their momentary confusion to inquire about the conditions of the orders to vacate. Stern replied that they were authorized to offer one thousand joirols for the land. He also promised that the Twin Cities would assume responsibility for moving whatever we wished moved. I thought it was a generous offer and said so.

Iroc was surly. "The Goddess must be consulted first." sulted first."

The lawyers started to protest that Iroc had no choice in the matter. The Hi-Priest rose ab-

ruptly to his feet.

"Begone!" he cried imperiously.

A thick ochre mist began to issue from every orifice on his body. It flowed lazily toward Stern and Krantz. Suddenly both their attache cases croaked and jumped off the table. The Nameless One had transformed them into real, three-foot-long frogs. Messrs. Stern and Krantz beat an ungainly retreat, struggling in vain to control their slimy, kicking attache cases. Iroc turned his awful gaze on me; in his outrage he supposed me to be in collaboration with the Twin Cities. I excused myself and left unceremoniously.

I MET IROC later that evening as he was heading out to the fields to commune with the Goddess. He was so lost in his own thoughts that he didn't notice my presence until I spoke.

"I thought you had contacts in the Cities," I said glumly, as I fell into step alongside him.

"Religion is one thing. Money is another."

"We should accept their offer."

"She would never permit it."

"So? It's our joirols at stake. If She can't see things our way, send her back to limbo and find a new god."

Iroc turned his head toward me, but in the darkness I couldn't see his expression. I could feel some intense emotion, however,

winding up inside of him.

"She will not permit such blasphemy, even from Her inner circle."

"But Iroc, you know that without us She's just another number in BOTI's files. She needs us, we don't need Her."

"She is more powerful than anyone imagines."

"She is only as powerful as we let Her be. Take away the amplifier and the worshippers and She's just another random packet of ectoplasmic energy."

Iroc thrust his face up close to mine. I could smell the tears on his cheeks.

"I love Her," he said bitterly.

I drew back sharply. I was shocked to see Iroc in this new light; he was not at all the sensible materialist that I had taken him for.

"That's the craziest thing I ever heard of. How can you be in love with an ultra-high-frequency wave phenomenon?"

"It isn't easy," he admitted.

He might have explained further had not an overpowering Presence intruded into our conversation.

It was the first time that I had ever experienced the Godhead without an amplifier. Although each human being experiences divinity in a different way, to me the Goddess manifested Herself as an immense, disembodied, motherly kiss. She was quite

pleasant at first, and I found myself unwillingly responding to Her psychic caress. But as passion replaced maternalism I began to fear that She might suck me completely inside out.

As I dropped to my knees from weakness I jostled Iroc, who had lost all pretense of self-control. Watching his possession made it easier for me to resist Her, until at last I was able to get up and run for my sanity. Her mocking laughter chased me all the way back to my pavillion.

Iroc had not returned by the time Stern and Krantz arrived to receive the Goddess's answer. I was worried about him, and was uncertain how much of my misgivings I should reveal to them. I decided not to say anything more than necessary. The two of them looked grim—and they made a point of carrying their materials in brown paper bags.

They were even less happy when I informed them that Iroc might not be available.

"Why do you people insist on muddling up a perfectly clear business transaction with all this trickery and cheap illusion?" asked Stern petulantly.

"I assure you, gentlemen, I don't want to cause problems."

"Well you already have," said Krantz. "You and Iroc will have some explaining to do to BOTI after yesterday."

At that moment Iroc

materialized in front of us, radiating an aura of divine power.

"The Nameless One says that She will never depart from Her Sacred Grove. She has taken it as Her home for all eternity. All who propose to desecrate it will suffer Her terrible wrath."

"Now Iroc. . ." I began.

"All unbelievers and blasphemers must leave Zo-ar!" he cried, levelling a rabid look at me. A sphere of oily blackness began to form around him. Stern caught me by the arm.

"Let's go."

Once outside, Krantz asked, "Where can we go to talk? Now."

"My pavillion is nearby."

"All right."

We ran to my pavillion, ignoring the pilgrims who had begun to pour out of the oracle, demanding refunds. Apparently the Goddess was in no mood for prophecy.

WHEN WE WERE secure in my rooms, Krantz began pulling parts of what appeared to be a disassembled amplifier from one of the paper bags. Stern positioned himself by the window. The sky was darkening ominously; there was panic in the pilgrims' angry shouts of betrayal. Krantz spoke in short, clipped sentences.

"I thought it would come to this. All right Scarfola, the game's over. We're not lawyers at all.

We're agents of BOTI. We've been watching your cult ever since Iroc first applied for a license."

"Why?"

Krantz looked to Stern across the room. "Your ectoplast," he said, "Do you know Who She is?"

"Uh. . . She told us She was the Goddess with No Name."

"That's just an alias. She's really Isis, escaped again from Orlu."

My starry future novaed; Iroc, Zo-ar and I were finished. The Nameless One was one of the dread Mystery Cult Gods! Years before They had attempted a religious coup by destroying all the other ectoplasts in the Cygnus sector. Their insane goal was galactic monotheism. It was only after they were narrowly defeated that BOTI had been set up to protect the religious freedom of the human races.

Krantz continued, ". . . so we bought off the local politicians. We convinced them to place their spaceport here instead of half a mile upriver. That way we'd have an excuse for monitoring your cult. We didn't count on Her going crazy like this and defying legal municipal orders."

"What's going to happen to us now? She seems to be preparing something awful for us."

"We'll be all right if we can get the Converter working."

"The Converter?"

"Central has decided that the

only way to teach the gods a lesson is to make an example of Isis. The Converter will change Her from spirit to matter. But we can only use it as long as Iroc keeps his amplifier on. It fixes Her identity in one place."

"But I still don't understand. What is the Converter? What will happen to Her when you turn it on?"

Stern walked away from the window and approached Krantz. He watched Krantz's slow progress nervously for a moment. Then he spoke.

"It's what we used on them the first time. It's what keeps the bad ones on Orlu and the good ones in line. When we turn this on, your Goddess will come pouring out of the sky. She'll be dead."

"The grove. . ."

". . . will probably be totally buried under Her. That's why we're telling you this. You'd better start to evacuate the place right now."

I went out among the pilgrims, who were just then beginning to push and shove one another: a human illustration of the principle of Brownian motion. The sky had turned the color of a poorly erased blackboard. I called out to them to return to their homes. I told them that the Goddess was displeased with their hypocritical worship, and that if they didn't leave immediately She'd work some awful evil on them all. The

ensuing stampede was messy but effective.

I thought for a moment of looking for Iroc, of pitting my reason against the Goddess's charms. The memory of that godly kiss, however, made me think better of it. I decided instead to check back with Krantz and Stern.

They were both working now, and were too absorbed in their task to do more than order me to run for my life. Though I knew I was merely trading one kind of death for another, I took their advice.

Just before I reached the outer boundaries of the Grove there was a clap of thunder. The sky began to lighten again and, to my astonishment, it began to snow. At first I didn't stop to investigate; I wasn't sure that I'd come far enough. Eventually I slowed down, since ahead of me there were only light flurries. I was saved.

I slowed to a walk and stooped quickly to pick up a handful of the stuff. Of course, it wasn't snow at all, but some sort of very thin, spongy wafer. It smelled like fresh bread. I broke off a corner and tasted it.

It was delicious, like some heavenly essence of peanut butter and honey sandwich. The word for it focused in my mind with dizzying clarity.

Manna.

I reflected on the Goddess's

precipitous dissolution with some anxiety as I brushed flakes of my late Benefactress from my clothing. My situation was grim. I had started the day a wealthy prelate; I would finish it a friendless pauper.

I was roused from my reverie by shouts. I turned and looked back into the blizzard. I could see Krantz and Stern plowing through waist-deep accumulations of the stuff. But it was not their shouts that had caught my attention. Much farther back, buried up to the armpits and no longer moving, not even trying to escape, was Iroc.

I watched in horror as the drift engulfed him. His last words still haunt my soul, a summation of the futility of his life.

"Mmmmmmmmf," he cried.

Shortly after Iroc went under, the two spurious lawyers staggered out of the manna-fall. I had to tug each of them to the shelter of a nearby stand of trees, where they sank gratefully to the ground, panting from fear and exhaustion.

"You saw what happened to Iroc?" I asked.

Krantz managed a nod.

"And the Goddess is . . . ?"

Stern gestured feebly at the storm, now slowly subsiding.

"Against BOTI the gods themselves contend in vain," I said piously.

"But listen. What do you people

intend to do about my investment? I should be compensated for my losses."

Something caught in Stern's throat. Krantz merely shook his head. Then, catching his breath

Then, catching his breath with difficulty he gasped, "Compensated! You've embarrassed the entire Bureau. After what happened here you'll be lucky if we recommend leniency."

Ah well! My tale really ends there on the borders of Zo-ar, although my life seems to drag on interminably. The trial was brief and notorious. They said I'd violated BOTI guidelines. "Impossible to prove," I reasoned soundly. They said I'd defied Carverian writs. "It was my partner," I argued pointedly. They said I'd cheated, deceived and disillusioned my flock for personal gain. I said nothing.

Only Krantz and Stern's good word at the last minute saved me from the peanut farms. Of course, as a convicted criminal I can't apply for a travel permit, so I might as well be incarcerated. And I can't find decent employment since I am both well-known and despised. Occasionally I pen historical monographs or religious greeting cards under a pseudonym. Thus I survive, but to what end?

My dreams are filled with lust for the sweet, soft, flaky embrace of the Goddess. ★

CHEAP THRILLS

JOHANNES GLIAMACUS

*You cannot step into the same
river twice—because while the
Past may be unchanging, you
will be different every time!*





TWO OF THE SLAVES rode on the back of the cart as its large wooden wheels cut parallel furrows from the gate on the side to the center of the arena. The third slave, a short, fat, animated man, pulled the nags hard by their harnesses.

The cart came to a halt beside the body, and the two slaves on the back jumped down onto the grey sand. The torso of the body was circled by a dark red stain of already dried blood. Its right arm had been severed before the short sword had plunged into its naked side.

One of the slaves looked dispassionately for a moment at the glassy-eyed bearded face. Then he grabbed the body by its remaining arm, and heaved it into the cart. The other slave tossed the severed limb on top of the corpse.

The third slave, the fat one, sweated and cursed the flies. He kicked one of the horses hard on its bony side. The cart began to move again. It still had to pick up two more bodies.

The crowd was becoming impatient. The afternoon contests should have begun already—and the corpses from the morning games were still being removed! The hot, noon-day sun beat down on the mob's frustration.

A vendor with a large basket of dirty cakes surveyed the crowd contemptuously. Provincial town, provincial dirt arena. He had been a vendor in Rome. Those were good games: stone seats; crowds of fifty thousand; and contests that started on time.

He grabbed one of his harder cakes and threw it in disgust at the slaves loading the last body. The cake hit against a wheel of the cart with a loud thud. The people around him laughed. Within seconds a stone arced through the air and struck a horse. It was quickly followed by another, then another. Soon the crowd was searching frantically for rocks.

The slaves ran quickly toward the entrance on the other side of the arena under a hail of stones. Two made it. The fat one, though, was hit in the head with a large rock as he crossed the center. He fell, and struggled to rise as rocks pounded his body. He made it to his knees.

Getting the slave put the crowd

into a good humor. The men around the vendor began to buy from him. They joked about the hardness of his cakes and about the dead slave. He quickly lost his contempt for them. Maybe the afternoon games will be good, he thought. Dwarves and women, maybe.

The guards cut the bonds of the naked prisoner, then shoved him into the arena. For a moment he lay where he fell, blinded by the sunlight. A shield and a short sword were thrown on top of him.

He was a large, muscular man, a captured Vandal. He had fought many times and he could fight well. Even so, two weeks of captivity and bad food had weakened him.

He picked up the sword and swung it, feeling its weight and size. *It isn't long enough.* He ignored the shield; he had never used one.

His opponent dropped fifteen feet from the first terrace to the arena floor. He was a young professional, trying to kill his way into the Colosseum with a net and a trident. He advanced toward the barbarian.

The Vandal circled toward the center of the arena, warily watching the Roman's net. *I can kill him quickly. He moves awkwardly. A yearling dog. I will have one more Roman head, despite this cursed sword.*

He fainted forward, and the Roman swung his net around in a wide arc. As it swung by him, the Vandal darted in, and slammed his

sword edge into his opponent's hip.

The Roman collapsed onto the sand, blood spurting from his wound. He quickly rose to one knee, his trident raised. The Vandal moved toward him searching for an opening. *He will die from that cut. But I will make sure he dies quickly.*

Suddenly he stopped. He looked around dazedly, as if he himself had been struck. Then he looked again at the fallen Roman. He raised his sword and continued his approach. This time, though, he moved awkwardly and uncertainly.

As he hesitated, his enemy regained his feet and picked up his fallen net. The Vandal attacked, swinging wildly at his adversary's head. The Roman easily ducked the unskillful blow.

The Vandal jumped backward to avoid the flying net and so it caught him perfectly, in mid-air. He crashed to the ground, entangled in its heavy folds—and fell on his own sword edge, which slashed his back. *I have no subconscious control except memory function,* he thought. *No higher conditioned reflex.*

As he struggled to kick free of the net, he watched the Roman slowly approach, trident raised, dragging his blood-red leg. He twisted desperately, and the trident plunged into the bottom of his rib cage, then into the hot sand. No longer able to stand, the Roman crashed to the ground beside him.

The Vandal's giant frame heaved as he coughed blood onto the hot sand. *The pain is hideous. It's supposed to be like that, I know—a Class C Experience. Still, I hope reverse transposition occurs quickly.*

Then he crawled to his knees and another consciousness looked frantically around the arena. *I was winning. I was going to kill him. Now on my knees with a trident in my side. I can't remember.* He looked at the struggling form of the fallen gladiator beside him. *I will still get my head.* He crawled toward his opponent, sword in hand. As he moved, the trident jerked along the ground, tearing up his guts.

The Roman saw him coming, and painfully stood up on his good leg. Blood still poured from his hip. *(I cut him well, the Vandal thought. The rest I don't remember. But I cut him well.)*

The Roman quickly stooped and grabbed the shaft of the trident, wrenching it from his side. Then drove it into his skull.

The crowd roared its approval.

THE SUN was setting redly on the edge of the desert. John Awatobi watched it as he knocked the dust from his boots against the running board of his pick-up. He watched it to see it change color. It didn't. *I have lost power. Before I could see the minute hand of my watch move. And the setting sun change color.*

The short, stocky Navajo swung

into the doorless cab of the pick-up, turned the ignition key and pressed the starter button. The engine turned over and he backed the truck away from his wooden shack and onto the dusty parallel tire paths which disappeared into the desert. *It's a good sign, the truck starting the first time. I will find power at tonight's ceremony.*

The sun had become a dull orange. He pressed the accelerator to the floor. *I will have to get to the meeting before it gets dark.* The headlights didn't work.

He had lost power in Albuquerque. *No way for an Indian to live, making money in a boot factory. Away from the desert, away from the peyote ceremony, away from my people, away from God, sewing leather in the dark corner of a boot factory.* He had not only been unhappy, he had also lost power and had gotten sick. Now he had returned, and the peyote would return his strength.

XENON SLIPPED through the dark, silent corridor thinking illegal thoughts. He had just completed his work period, and he was going from his work site to the transposition chambers. It was the only time it was possible to think non-work-related thoughts; illegal, chaotic thoughts.

The rest of the time, he could concentrate on his work. Because the rest of the time there were no distractions.

Not only did distractions make work less efficient, they were also unstable. So they had been eliminated.

The Goal, society's Goal, was complete stability. All work, in one way or another, led to the Goal. Complete stability meant complete knowledge, the Equation which encompassed every variable.

The big problems had been the easiest to solve. They had become independent of the dying sun. They had eliminated most other life forms. They maintained a completely stable population.

It was the smaller variables that were difficult: The effects of a single microbe or a single erratic human cell. The effect of light from distant stars.

The human variables were even more difficult. Not the mechanical distractions—digestion, reproduction, sleep, and motion—those had been solved easily. The only motion that was still required was the trip to the transportation chambers. And even that didn't require motion of the body itself. Still, it was motion, and motion was both contrary to stability and distracting to work.

Xenon had received a communication that future transposition would take place at the work site. The last mechanical distraction had been solved. No more illegal thoughts.)

The mental distractions were the difficult ones. A brain couldn't work forever in an almost-completely-stable environment with-

out being destroyed. A brain needed sensual and emotional input.

An Experience, a transposition to a past body, compensated for the sensory deprivation of a work period. In the past body, a sense-starved brain fed on pleasure, pain, light, color, sound, sex; felt fear, tension, aggression, joy. All of which was a normal part of the past, but distractions in the present.

After an Experience, a person could concentrate on his work for another forty or sixty hours.

Xenon arrived at the transposition chambers. The Regulator communicated the type of Experience he was to have. Class X—religious.

A person never knew exactly what his Experience would be. And he never remembered what it had been. Non-work-related memory was distracting.

But he knew what general type to expect. He wouldn't enter an aggression Experience ready to sing, or a sex Experience ready to fight.

THE PICK-UP sped along the dirt road toward the fading light in the western sky. Abruptly the road curved around a small, sandy rise, and instead of following it the truck continued in its straight path. As soon as it left the road, a front tire hit a rock and exploded. The pickup fishtailed up the rise to a sudden halt. A dusty Navajo climbed out of the cab, and dazedly searched his memory for clues to repairing the truck and reaching his destination.

Fifteen minutes later he pulled up beside a wooden house on the outskirts of a small reservation town. There were other old junkyard cars parked outside, as well as a new '54 Chevy. A group of men and women were conversing outside the door.

"John Awatobi's back," one of them said as he climbed out of the truck and walked toward them. He greeted them as best he could.

TRANSPOSITION didn't work with all past bodies. Only with the ones that didn't matter. The ones that couldn't possibly affect the future because they would die soon, or because any accomplishment they had power to make would be quickly washed away by the strong current of history.

So, while the past one's consciousness was stored in the present, the consciousness of the invader-parasite couldn't do anything to change the future. Even if he wanted to.

IT WAS GOOD. Shaking hands, friendly arms on his back, people joking and calling him by name. John Awatobi. He had only been half an hour in the past body, yet already he was identifying with the past body's name.

The meeting began with singing, then prayers. A sense of brotherhood, of oneness, became the overriding consciousness.

The acrid pulp of chewed peyote

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fought its way down his throat, into his empty stomach. Nausea swirled around the incessant pain of sitting on the hard wooden floor.

Time passed. He ate two more buds. He watched (his) friends sitting cross-legged, meditating, and he watched the fire burn, and the colors on the wall tapestries swirl around themselves, then leave their two-dimensional prison to curl into the space of the room.

He watched as Jesus materialized before him and said "I give you power and health and brotherhood with the World," and then left. His identity with Xenon faded and he became John Awatobi. The subconscious of the Navajo melted into his consciousness, and Awatobi's mind became integrally fused with his own.

JOHAN AWATOBI broke out of his meditation and looked out the window, grey with false dawn. He rose and went outside to piss. *A powerful meeting. I don't remember it. But I feel it: it has changed me. I have gained power.* He could see the sky slowly brighten. He quickly constructed a rough equation of light intensity as a function of time. Then he buttoned his fly and went back inside to talk with friends he hadn't seen for three months.

XENON was in the middle of the dark timelessness of a work period. His machines and his machine-like mind churned monodirectionally

toward the Goal. Nutrients and stimulants poured into his bloodstream, waste products poured out through elaborate catheters, machines regulated his body temperature and respiration, repairing failing tissue. He lay motionlessly in his mechanical womb. Advancing the Equation. Solving stability.

Suddenly his mind left his problem. And confronted a darkening sky and a broken '37 pick-up on the top of a sand dune. Shocked, he realized he was remembering his last transposition, his last Experience. No one had ever done that before.

A distracting memory. But more than that, a distracting consciousness, the consciousness of John Awatobi fused with his own.

An unknown variable had entered into the Equation.

"PLAY FOR ME," the lady said to the minstrel.

The minstrel had played his music for her earlier. Then, even though he was reputed to be a very trustworthy minstrel, he had seduced her into letting him accompany her to her chambers.

He rose from her bed and walked naked across the room to where his lute leaned against the stone wall. He handed it to her and sat on the bed beside her.

"You play for me this time," he said.

She sat up holding a blanket to her breasts, and took the lute from

him. She began to sing softly.

He supposed he could play it, digging notes from subconscious memory. But musical talent, like fighting ability, was probably a combination of subconscious memory and conscious attitude. He didn't want to destroy an Experience by playing bad music.

The lady played well.

It would be a good memory. Since the fusion with Awatobi, he was able to remember every Experience in his distracted present body.

Suddenly, he heard the scream of the lady's servant in the outer chamber. The curtains hanging over the doorway parted, and a red-faced knight entered. The minstrel leaped up to protect the lady, then realized too late that he was the target. The sword thrust toward his groin and terror exploded over his consciousness. Then he was back.

His awareness emerged at his work site. *I'm glad I was spared that.* Another distraction: guilt. The minstrel would have died of the plague in a month, and the lady would have fallen fatally from her horse before that. Still, it was a perverse freedom. To make decisions and have others pay the price. *But it is better than living in the present. Here I am a slave: I make no decision at all.*

His sabotage began subtly.

TIME, MEASURABLE only in the number of Experiences, increased

his memories and increased his emotions. He made mistakes in his work. He moved muscles that were not to be moved, and he made noise with his vocal chords. Once, he communicated a "have a happy Experience" to a person nearing the end of his work period. He felt supremely foolish (another distraction) when he did this, but it had helped.

There were times when he longed to dance or sing or simply stand in the present body. Real singing and real dancing. But he always stopped himself. He knew that if he did, the flaw in his psyche would be monitored and fixed. And he would lose his memories of almost-real dancing in long-dead bodies.

His fear of being found out grew to profoundly psychotic, distracting proportions. He tried to make the monitors in his section inoperative. Then he had to cover his traces by communicating lies to computers and to other people. And submit false solutions toward the Goal because with all his distractions he didn't have time to make them correct.

One work period he could no longer stand the motionless, timeless deadness of the present body. So he disconnected himself from the tubes, sensors, and machinery that had for centuries surrounded him.

He was free. Because it was his own body, he was freer than he could ever be in a past body. This was a different freedom, a profound freedom.

He stretched muscles maintained at optimum strength by machines. Without the sense-deadeners pouring into his blood-stream, he could feel. He felt his body, *his body*, then yelled as loud as he could.

It was, of course, too large a lapse to hide. The society would repair him, and if he were irreparable it would terminate him. And he no longer cared. That in itself was freedom.

He walked out into a dark corridor once used by machines when motion was necessary. He came to another work site.

The dim figure inside the machinery was a woman, unconscious, living in a past body. Xenon began to free her from her machinery as he had freed himself. Her body also was in optimum condition. Much better than past women, he thought. Not able to do anything else, he ran his hands slowly over her inert body.

Suddenly, her consciousness transposed from the past. Her muscles tensed, and she stared at Xenon, shocked, completely distracted. Then she made noise with her vocal chords and he left quickly.

He walked down another corridor toward what had previously been the transposition chambers. Suddenly he saw another man, leaning against the wall of the corridor. A Regulator. This time it was Xenon who was shocked.

"Another one," said the Reg-

ulator. Then he looked at Xenon closely. "But I know who you are."

Xenon stared at him. The stranger had used his vocal chords to communicate. And he couldn't know Xenon.

"Why are you away from your work site?" he asked.

"I was in my fortieth hour," said the Regulator. "I got tired."

"How could you be tired?"

"Not tired. The injections take care of that. Just bored. Distracted. In a way, it's your fault."

"My fault? But that couldn't . . ."

He knew he had been a decaying factor, a chaotic variable, a detour on their road to perfection. But he couldn't have had that kind of influence. He couldn't have caused others to free themselves from their machinery.

"It isn't true," he said firmly.

"No? Then how do you explain it?"

"You are flawed like myself. You've had a fusion during a transposition."

"No. Not a fusion. True, it's you who caused the deviation. But not in the way you think."

Suddenly Xenon understood.

"You're from the future," he said.

"Brilliant. But of course you ancients were much more intelligent than we."

"But why do you come here? It doesn't make sense. Why don't you go back further?"

"Because of you. Time has magnified your flaw. The future is a very chaotic place to live."

"You need order?" It was difficult to comprehend.

"Yes. But more than that, we need to rest our emotions. We need to use our minds. And we need safety.

"Our emotions are wrenched hourly from love to hate, from despair to joy. Relationships between people are intense, complex, and inconstant. We are continuously bombarded by sensual stimuli. So we escape. To the most ordered period of our past. To your present."

"No one has ever transposed my brain," said Xenon.

"No one would; it's too turbulent. It wouldn't be much of an escape. But more importantly, we couldn't have transposed into your body even if we wanted to. You have been the only one in the world at this time who matters. That is the Goal, you know. To create a society where no one matters. To create the ultimate stability: death. But you changed that. You changed the future."

"And I assume that I can no longer change the future."

"Correct. My ability to speak to you is evidence of that. I suspect that right now your society is moving to eliminate you. What it can't eliminate are the seeds of chaos you've planted."

Xenon considered the situation. It

was time to make a decision. And pay the price himself.

"If I no longer have power to affect the future, I can leave. I want to leave."

"How?"

"Your host brain is a Regulator. Transposit me to a past body. For good."

The Regulator searched his memory.

"A permanent transposition would be difficult. The past body would have to be powerless or dead before you could possibly change history."

"I know. I just want to be free for more than ten minutes or ten hours at a time."

"The most time I can guarantee you is two months. Provided you make the right choices in the past body," said the Regulator thoughtfully.

"Also, in a one-way transposition, the details of time and place would be handled by the machinery. You will probably end up somewhere you have been before."

Xenon thought of a lady who played the lute for him long before.

"That's all right," he said.

The two men walked toward the transposition chambers.

HE LANDED in a crouch on the hot sand. Grasping the heavy trident he faced the large barbarian who circled toward him, deftly stepping over the fly-covered body of the fat slave.

★

ELMO'S BOX

*For every action there is an
equal-and-opposite reaction!*

L. D. Fitzpatrick



I SEE where they've finally decided to close down the Blakefield Museum; stuff wouldn't stop disappearing. It's all Elmo's fault.

Elmo Farnham's great-grandfather was Amish; his grandfather lost the faith, baby, and Came Out Into the World. I've often wished I could meet that old gentleman; I'd love to bust him in the mouth, just once.

I'm Ed Jenkins, Elmo's oldest and closest friend—or rather least acrimonious enemy. He doesn't need friends; what he needs are keepers.

You see, he likes to invent gadgets—Great-Grandpa must be doing about a thousand r.p.m.—which he then sells to people as screwy as he is. (He likes to quote Edison's maxim about genius being 2% inspiration and 98% perspiration, and then add that while that may have been all right for a quaint, old-fashioned type like Edison, smirk, smirk, *he* won't settle for anything less than 50-50.) His sales, and winning defamation of character lawsuits, keep bread and Bordeaux on the table, but it causes ulcers. But not usually in Elmo; he's what doctors call a Carrier.

Except this time.

I was sitting in his living room—a masochistic habit of mine—when I had occasion to throw a beer can away. I had to hunt for an unfilled trash basket, which caused me to remark irritably, "You want to invent something, why don't you invent a way

to get rid of trash?"

"I have," he answered calmly. "I just throw trash in, and it comes out in a chasm in the Himalayas."

"Figures. Only you would use the Top of the World for a garbage dump," I said acidly. Then I did a double take. (Okay, I'm slow. So sue me.) "Hey, you mean you have a teleport machine?"

"Yes—well, no, not really. It's something like a teleporter. A teleporter was what I was looking for, but what I got. . .ah, the hell with it." He shifted to a more comfortable position in his chair. "I don't feel like talking about it." He twisted irritably. "It's goddam frustrating. I got an idea, thought maybe I could get a teleportation machine. Worked on it for two years, damn near worked my butt off, and now I got it, it *isn't*, really, so I got nothing for my trouble. Damn. I could of made a fortune."

"You've already got a fortune."

"I've got several fortunes, and I've spent several dozen fortunes; always room for one more."

"I don't know what good another invention would do you. Even you can't earn it—or even spend it—faster than they can print it."

He grinned. "Maybe not, but a man can try."

We fell silent for a moment. Elmo stared into the fire—which shows you what a big detonation he is, because what mere mortal could afford to burn wood.

Finally I said, "Okay, it isn't a teleporter. So what is it?"

He looked up. "You still on that? I said I don't want to talk about it. Change the subject." He stared morosely into the fire a moment and then said abruptly, "It's an alternate-universe machine." That's Elmo. He's so contrary he won't even do what *he* wants.

I raised my eyebrows. "You've got a machine that creates alternate universes?"

"Not creates. Contacts." He started to warm to his subject; he loves to explain. "The universes—call them alternates—already exist; I've managed to prove that there are a transfinite number of them."

"You mean an infinite number?"

"Not just a simple infinity—denser.

Just looked blank.

"Look, you know, I presume, about Heisenburg's Uncertainty Principle?"

"In a vague sort of way," I said.

"The Principle states that the position and momentum of an object are indeterminate; the object doesn't act as if those quantities had exact values—there's always a small uncertainty. The product of the uncertainties of the momentum and of the position is a constant. The tighter the constraints on the momentum—that is the smaller the uncertainty—the looser the constraints on the position—that is the larger the uncertainty. It has to be

that way, or the equation won't come out right. Write the equation another way, and the energy an object has during a given event and the duration of the event are related in the same way.

"A whole slew of things—radioactive decays, fissions, photon emissions—are influenced or controlled by the Principle.

"Now, for any event, each Principle-influenced quantity has an infinite number of values it can take—all within a very narrow range, of course. Now for every event in space-time, there exists a universe for each value each quantity can adopt."

I chewed on that one for a while. "Then for every point in time, there's an infinite number of alternates. No, more than that because at any given point in time there are an infinite number of events occurring, so—"

"Not infinite," grunted Elmo. "The number's large, but finite. It's less than the factorial of the number of particles in the universe."

"You don't know for sure that the number of particles in the universe isn't infinite," I pointed out.

"Unh. Well, yeah, that's true, at least in theory," he admitted. "But *practically*, we can assume the universe is finite. Besides, you'd still be wrong. The numbers aren't multiplicative, they're exponential. Look, think of it as a tree. The trunk is our universe. Every point on the trunk has an infinite number

of branches. Let's consider all the branches from the trunk at a certain height. Just above that point, the trunk would branch again—and so would all the branches!"

"Yeek! You're right!" I tried to chart it in my mind. "Good Lord! To graph it, you'd need an infinite number of dimensions, even for a finite section of it!"

"You mean a bounded section. That's why I said there were a transfinite number of them, instead of just an infinite number."

"I boggle. How do you find a particular alternate?"

"I don't. I just set limits—rather large limits unfortunately—and the machine bounces around at random inside those limits. The selection process is also controlled by the Principle, so it *has* to be random—there's no help for it."

I thought for a moment. "And you can send something anywhere in one of these alternate worlds?"

"Sure. I told you, I was looking for a matter transmitter. But the transmission effect is tied up with alternatives—and there's no way to untie 'em."

"Too bad. But it seems to me that alternate-universe effect could still be useful."

He shrugged. "Maybe later. It's not finished; I'm going to add a view screen and a force-field to protect the traveler. Right now, though, it's too dangerous to be useful."

"How d'you figure dangerous?"

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"Look, you jerk, the *energy* differences'll be small, but that still leaves room for big differences between alternates from the point of view of, say, sociology or biology. I could be arrested for wearing socks, or attacked by unicorns, or any damn thing. There wouldn't be any rules any more."

"I don't see that. In fact, considering how small these Heisenburg changes all are, I don't see how they could cause gross changes—unless you're talking about alternates that are a very large number of branchings away from ours?"

He gestured impatiently. "Don't be ridiculous. The Principle—even in single applications—it shows up on the macroscopic scale—a lot. Look, say a man makes a random decision, one where all things are equal, so he's just picking his choice out of thin air. Say he's picking a number to play at roulette. His choice will be influenced by the Principle. Any arbitrary decision—and a person makes 'em all day long—is like that. You can change a man's life completely just by changing Heisenburg events."

I thought about that. I wasn't sure I liked it. "You're saying free will is the Uncertainty Principle."

"You got it." He smiled derisively. "'The displacement is small, and the momentum high, that leads to salvation.' Hallelujah!" I colored, and he snickered.

"I don't see how that could get you attacked by unicorns," I said,

to change the subject.

He looked at me as if I were an idiot child. "Look, it's not just mental things; for instance, out of millions of spermatozoa, a particular one fertilizes the egg. That's influenced by the Principle. So are mutations. So are any number of other things."

I WAS THINKING about that when I left his house that night. My thoughts were eerie. A slight, random change in the ratio of the momentum to the position of a molecule—and Fleming doesn't stumble upon penicillin. Lincoln decides not to go to the theater. Hitler attacks Stalingrad a month earlier. He was right; the world could change entirely. Of course, most changes would show on the surface, so you would be on your guard, but many might not. Best to leave it alone.

Of course, if Elmo stayed inside a force field, as he said he would, there would be little danger. Still, I didn't like it.

So I wasn't wildly enthusiastic two weeks later when he called to say he'd finished the machine.

I went to his house. "C'mon," he said, and I docilely followed him to an elevator which he'd fiendishly devised to drop at the right speed to make me just as airsick as I could get without messing up the inside of the elevator—though a couple of times I've fooled him. The fiend himself is immune to airsickness.

This time, though, he took it slowly, which put me on my guard. He apparently wanted me in a good mood. That meant he was going to try to persuade me to accept something I shouldn't, and *that* meant that he wasn't as confident as he acted. He felt a need for my agreement.

When we arrived at his laboratory—which by a whim of his was far underground—he led me through a maze of rooms to one I'd never been in. Almost the entire room was taken up by a large, untidy machine.

"The alternate machine," said Elmo unnecessarily. He pointed. "Controls. Vision screen. Computer terminal and display." He slid back a panel in the machine, revealing a curved wall. He waved his hand across a photorelay and a section of the wall slid out and away. "Transmission field chamber." He pointed to a hollow glass cylinder in the center of the chamber. "Transmission cylinder. I ride in the cylinder; the force field follows the lines of the chamber, but the chamber doesn't go anywhere." He walked to the control board. "Now I'll show you how it works. What would you like to see?"

A thought struck me. "Say. . . if those worlds are almost exactly like ours—"

"They are, for the most part."

"—then what you've got is the world's worst eavesdropping gadget! The military would love

this. Or the police—1984 without being obvious. Or—"

"Or the busybody next door. A lot of people love a police state; it gives them an excuse to spy on the neighbors. But don't worry, I'm not about to turn it loose. Besides, it wouldn't be much use to the military or paramilitary; you never know which parts of the alternate are the same and which are different, so the facts aren't reliable. It's a toy; no more."

"Well, come to that, what good is the transmission part of the machine?"

He looked at me contemptuously. "You must be kidding. Look, stupid, a transfinite number of universes means an unlimited supply of anything you'd care to mention." He waved his arms. "Metals. Oil. Wood. Uranium. Anything!" He dropped his arms and scowled. "It's so damn frustrating. I could go, I could get things and do things, except I'm afraid to."

I should have realized that was what was bothering him. Elmo isn't the kind of person who likes to admit fear, and this being afraid of an intangible *possibility* of danger rather than a specific danger, was getting on his nerves. Hence his determination to finish and use the machine, thus removing the fear, and building his self-respect, by creating safety. Hence also my presence; his fear made moral support desirable.

Suddenly Elmo turned to the con-

trols. "But I asked you a question. What would you like to see first?"

"Well, what's the first thing you looked at when you got the screen hooked up?"

"My home. I figured I'd be most able to see differences there."

"Your home. That figures. Okay, Narcissus, lay it on me, as they used to say."

He found my rooms and began flicking from alternate to alternate. I was in some of those pictures; it was an odd sensation, watching a duplicate of myself carry on his and, essentially, my life. After watching myself for a while, I began to feel acutely uncomfortable.

"Some of those other me's are somewhat peculiar. Okay, enough of my—God, what a hideous painting!—rooms, let's see what the rest of the world—I mean worlds—I mean let's see something else."

"Okay. It'd better be a city; no rural or suburban places have enough variety for us to be likely to hit on a change right off."

"All right. How about New York?"

"You have no imagination. All right, New York it is."

He consulted his notebook and touched some contacts. "Voila Times Square." He began jiggling the button, and the scene grew intermittently peculiar. Not architecture too much, but clothing and shop windows. I mean, businessmen in kilts? Grecian robes? Mukluks? Shaved heads on women?

Casual nudity—in churches and synagogues?

"I thought they were supposed to keep their heads covered."

"Maybe they're Reform."

"Doesn't your machine pick up anything but extreme variants?"

"These aren't extreme. There's no such thing as an extreme clothing fashion. There's nothing New Yorkers couldn't get used to in a month."

I had to agree—especially after he focused on a rather attractive girl sitting on a bench, and took her all the way from nudity to heavy veils—without even changing her position. "If these are more or less average, then what are the extremities like?"

"Not much different. There's only a finite number of ways clothes can be worn or not worn, given a certain level of technology."

"How about art, music, the theater?"

"The same, at least for the modern stuff. Let's see if we can find a museum and I'll show you."

He chose one he was fond of visiting when in New York—or rather its duplicate. He panned through the doorway. The exhibits were not especially remarkable; in fact Elmo remarked that they were mostly exhibits he recognized as being in the museum in this world.

Until. . . .

Elmo was reaching for the change button when he suddenly jumped

and backtracked. He centered the screen on a piece of sculpture which showed several very life-like statues of both sexes. They were engaged in activities hitherto considered inappropriate to art galleries.

I felt myself blushing. "Jeshua Hashimoto the Anointed," I blurted. "I'm no prude, but—"

"Yes, you are. You always have been. Well, you wanted variety. I'm kind of out of touch with the museum, but I'm fairly sure *that's* not in it." He contemplated the statue for a few moments, and then said, "Maybe this alternate is going to be interesting after all. Let's see what else the museum has."

He scanned down uninteresting corridors and past unspectacular exhibits until we reached a doorway

flanked by guards.

"High-security room," he said. "That bastard."

"The room is a bastard?"

"No, the last owner of that new Titian." He gazed thoughtfully at the door. "Hmmm. You know, I never thought about it, but this machine'd make the perfect getaway vehicle. A criminal could disappear completely in an instant, if he committed the crime in an alternate different from his own. The police couldn't find him; he wouldn't even exist in their world! And even if they could, he'd be outta their jurisdiction. Boy, would he be outta their jurisdiction!"

That's when I began to get uneasy. "What're you thinking of?" I asked.

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"I tried to buy that painting for myself." He sent the view through the door and towards the case containing the painting. "The owner wouldn't let me have it, unless I'd agree to put it in a museum. He said it was 'public property' or something. But if I swipe *this* Titian, I'll have it and the public will have it too."

"But the alternate universe people won't have it!"

"My heart bleeds for the alternate universe people."

"But what about the guards . . . the alarms . . . what if there are automatic defenses?"

"There are. Stunners set in the ceiling. But so what? The shield's impermeable to anything but electro-magnetic radiation—so I'm safe unless someone's carrying a laser, which ain't likely." He manipulated the controls. "It'll be easy. Watch." He opened a cabinet and pulled out a hammer. He then turned to the controls and touched a contact. He gave me an evil grin and entered the chamber.

I had been groping for words without finding any. "Wait," I said in desperation to the closing door, but as I expected Elmo paid no attention. Helplessly I turned back to the screen.

Part of the picture shimmered, and Elmo and the cylinder appeared next to the display case. Elmo opened the cylinder, walked to the case, carefully broke the glass, picked up the painting, and returned

to the cylinder and entered it. He grinned and thumbed his nose at someone I couldn't see. As a light in the cylinder wall turned green, he touched a contact and vanished.

A moment later he came out of the machine, the painting clutched in his hands. "I got it!" he crowed, and shoved the painting at me. I stepped back. "Here, look at it," he said, and tossed it in my direction. I juggled it frantically.

"Elmo, be careful!" I begged. "These old paintings are fragile!"

He snickered. "So what? I can always get a replacement." He grabbed the painting back.

"Elmo, I don't like it. Send it back!"

"Nothing doing! In fact, I'm going to see if I can't find something else worth stealing."

"NO! I mean. . . Look, Elmo, at least do this, as a favor to me. Take the painting upstairs and put it in a safe place. Then stop and think for while before you go after anything else. Please!"

"Well. . . Sure, why not. As a favor to you. But it won't change my mind."

He shut down the machine and locked it, then took off through the maze of laboratories at a dead run. Like most children, he gets athletic when he's excited. I followed, puffing. He got to the elevator before me and was waiting impatiently, as if it were he who wanted to escape the machine and I who wanted to remain. I stepped into the elevator,

and we shot upwards so fast I fell to my knees. I yelped, and Elmo uncomfortably tried to look unembarrassed. When we got to his quarters, he was more subdued, but still cocky. He trotted to a painting on his wall and replaced it with the Titian, then went to his bar, poured himself a drink, and flopped into a chair, incidentally spilling most of his drink in his lap.

"So talk," he said, wiping Scotch off of his pants.

"Not while you're in this mood." I'd seen him that way before; King Canute's chances were better, there on the seashore. "Let's wait till you calm down."

He grinned Satanically. "What makes you think I'm going to?"

Desperation, that was what. "Tell you what: it's after noon; this week's *Time* will be out. I'll read that, and then we'll see if you listen to reason. Okay?"

He was too busy admiring the Titian to answer.

I accepted that as a yes. I tuned in the trivee, decided on the Art section, dialed—and found myself staring at it.

"Elmo," I shrieked. "Look at this! The statue!"

He glanced unconcernedly at the screen. "So what? Almost everything about that alternate was just like ours. Why not that?"

"But you said art would be different!"

Hell, even *I* knew *that* was silly. Elmo looked at me scornfully. "I

said *likely* to be different. I didn't say it *had* to be. And remember, most of the other exhibits were the same as ours. I didn't get excited about them; why should I get excited about this?" He set down his drink and opened a panel in the chair-arm. "However, if it'll make you feel better." He punched for the *Times*, which, as a continuous-update paper, should already have had a bulletin about any museum robbery, unless the police were sitting on it.

He got the front page and knocked his drink off the chair-arm. "MUSEUM ROBBED BY VANISHING THIEF. Oh, God!" He looked at me wildly. "But that's impossible. It's not a teleporter!"

I read on in horrified fascination. "Da Vinci, Rembrandt, El Greco. . . Elmo, there's a whole list of stuff here!"

"What!? B-but I didn't take anything but that Titian! You stopped me."

Dawn broke, blinding, and I burst out laughing. He stared at me in shocked disbelief, as if I'd poisoned his pet transistor. "You!" I gurgled. "I stopped you!"

"Unhh. . . no! Oh, no! Oh, *no!*"

"Yes! Millions—an infinite number—a transfinite number of alternates, a transfinite number of Elmos robbing a transfinite number of museums! Of course there's overlap. Some of the robber universes are also robber universes."

He groaned. "I won't be able to

give the museum back its paintings, because I don't have them—just the Titian!”

“You could give the alternate museum back the Titian.”

He shook his head miserably. “I can't even do that. I turned off the machine; the alternate's lost; I'll never find it again.” He looked up at me, oddly. “Besides, why would I want to? What good would that do? What I really need to do. . . .” He started. “Sure! What I really need to do is go to the other alternates and steal replacements for the paintings the museum lost.”

I sighed. “I figured you'd think of that. That's why I suggested you send the painting back. The other Elmos—the robbers who are in universes which are also victim-universes—the Elmos who find themselves in the same predicament as you—they'll think of that too. And they'll rob other universes for replacements, including some universes containing Elmos who got away their thefts, and some with no thieving Elmos. And the Elmos who get in trouble because of *those* thefts will *also* steal replacements. And it'll go on. You—all of you—have started a series of troubles which will spread like ripples in a pond. God knows where it will end.”

“But I *have* to. The guards will have seen me—him. My fingerprints'll be on the case. The police will know who I am—I mean who he was. Any minute now—”

Right on cue, the doorbell rang.

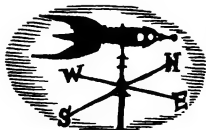
THAT WASN'T THE END of it, of course. Elmo showed the police the machine and Told All, and in time it was decided that he might replace the stolen art treasures from other universes—a disturbing decision.

Objets d'art continue to disappear from the museum, and Elmo continues to replace them. Why do they disappear? Has some Elmo kept his machine running, zeroed in on us? Or are all the thefts by different alternate-Elmos? Some of the stolen goods were duplicates of previously stolen ones; would the same Elmo steal multiple copies? What is the ratio between Elmo-thieves and potential victim-universes? How does one divide trans-finite numbers?

And that's not the worst. We chose the Blakefield Museum by chance. In other places in the transfinity of worlds, are there other Elmos who chose other museums? How long before the ripples of thievery from *those* foci reach us? Will anything of value ever be safe again? And what about those who aren't just thieves? Elmo responded to greed and esthetics; were there others who responded to lust, sadism, hate, vengeance-longings?

When Pandora opened the Box, she let a multitude of troubles into the world, but at the bottom of the Box was Hope. But the number of alternate worlds is transfinite—limitless.

Elmo's Box has no bottom. ★



Dear Editor:

Ursula Le Guin's excellent and insightful essay on science fiction in the Dec. issue of *Galaxy* started me thinking about my own criterion for judging SF. While I still can't give you a precise definition of what a truly great SF story ought to be, I do have some definite ideas about what makes a story fail. Here are some common pitfalls that I believe do more than anything to relegate a story to the "not worth reading" class of literature:

1. Fantastic gadgets and weird alien beings do not make a science fiction story unless they are an integral part of the plot. How many times have I read a story whose only claim to being SF was the fact that it was set in the future or on some distant planet? If such a story could just as easily take place in modern day New York or San Francisco it's not SF.

2. Science fiction is, of course, fantasy. It is the mood of a story that engenders the sense of wonder and mystery that is so essential to any fantasy. Put modern slang in the mouths of characters supposedly living in the year 6000 A.D. or create starship captains with the emotional control and mentality of ten year old boys and you destroy mood.

3. Some theorizing in a SF story when offered as explanation is usually essential, but page after page of it makes the story tedious and demonstrates that the writer really

doesn't know where he's going.

Of the half dozen or so SF magazines on my local newsstand *Galaxy* is by far the best. On the whole the writers whose works appear in it steer clear of these pitfalls and produce superior fiction of absorbing interest. It's this kind of Quality that keeps me coming back to *Galaxy* month after month and for it I thank you very much.

Sincerely
M. Bowen

Santa Rosa, Cal.

A letter to Galaxy's Science Editor:

Dear Dr. Pournelle,

As I am sure you know, Larry Niven wrote a story (The Borderland of Sol) that featured quantum black holes in the January '75 issue of *Analog*. I was practically poised with pen in hand to write to him when the January issue of *Galaxy* arrived and made my letter unnecessary. Your article answered my basic question—where was he getting his facts from? It seemed to me that only someone who was actively engaged in relativity or astrophysics would be up to date on charged or quantum black holes, but it is clear after reading your article that you are both on top of recent developments.

I would like to make one or two comments deriving from your remarks. First, Hawking's result on the dissipation of small black holes because of quantum effects is discussed in Kip Thorne's recent article in *Scientific American* (The Search for Black Holes). However, he gives few details on the mass/lifetime relationship. It also seems as though there should be at least one good story involving energy extraction from the ergosphere of a rotating black hole, but I have not seen anything along these lines—have I missed one? Roger Penrose originated, or quoted, another interesting idea a few years ago—the use of the black hole as combined garbage disposal unit and energy source. Garbage in, a substantial proportion of the rest mass out, as radiation. Ecology buffs might object, since recycling presents apparently insuperable problems. Just about

everything thought or written about black holes is either described or referenced in Misner, Thorne and Wheeler's magnum opus "Gravitation", current up to about mid-'73—including the real problems that singularities present in relativity. These singularities imply that classical general relativity has to be an incomplete theory, and most people look to some form of quantization as essential—what Wheeler referred to some years ago as the 'fiery marriage of general relativity with quantum physics'. (Hawking's paper on small black holes introduces a few quantum mechanical concepts, but does not perform the fundamental re-shaping that seems to be needed. Hawking and Ellis, in their book "The Large Scale Structure of Space-Time", clearly outline the problem).

Looking forward to more stories and articles on wormholes, naked singularities, Kerr-Newman black holes and other delicacies from you,

Sincerely,
Charles Sheffield

6812 Wilson Lane,
Bethesda, Maryland

Jerry's reply follows:

Thanks for yours of December 27.

Yes, I was aware of the material in Thorne's article and the book he did with Wheeler and Misner. A couple of years ago Kip gave a lecture at Cal Tech on Black Holes, and Larry Niven and I attended it—that's what got us interested at the time. Since I have press credentials it was easy enough to get a long interview with Thorne later, and also another with Lee and Lightman, two post-doctoral students at Cal Tech who did a lot of the actual work on the Thorne project.

They were assigned the task of taking all experimental evidence known and trying to discard one or another of the relativity theories. As you may have heard, not only couldn't they eliminate any of the better current theories—but they were also able to come up with their own equations.

They also told me that in Lee-Lightman

theory it is possible to send messages—but not material objects—at speeds faster than light.

If it is possible, the implications are profound, and even if Lee-Lightman theory is wrong, the fact that we've got a theoretical model not inconsistent with any experimental data that allows FTL communication is one of the most exciting developments I can imagine.

Best,

Jerry Pournelle

PS: If I can get out from under deadlines—including rush jobs for a certain galactic magazine editor [*Ahem—Ed.*], I've got a dilly of a black hole story I'm writing . . .

Another letter to the Science Editor:

Dear Mr. Pournelle:

I have just finished reading your article in the November *Galaxy*, concerning memory. At the risk of boring you to death, I will now submit an unsubstantiated hypothesis which I have about memory, and ask you if it fits with your holographic theory.

To begin with, I discovered that most of the people with whom I could relate intellectually had a memory which went back to the age of two. By contrast, most of the people I could relate to only superficially could not remember much before the age of five.

The main visible difference was that the people who could remember their early childhood tended to form their own hypotheses, while the people who could not remember tended to accept one of two conflicting theories on any subject. For example, most of the people I knew who accepted the theory of a specific "New Left" group could not remember beyond age five, while most of the "independent" Leftists could remember to age two.

On the basis of this small sample, I formed the following hypothesis:

Since the variation in the age of earliest memories runs from two to (in a few cases) eight, it was unlikely that it could be explained by any biological variation at the time the memories were recorded. It was

more likely that the variation was caused by a difference in mental patterns which developed later.

Since children have a very different view of what they see than adults, the main problem in remembering would be to relate the object which was observed at an early age (when it had a totally different meaning) to the object as it would be observed by an adult. For example, a person who thought of old people as having great wisdom when a child, and who thought of them as senile as an adult might have two completely different symbols for the old people he saw at different times, and be unable to relate the two.

If the individual had discarded his childhood view of reality and accepted the view of the adults around him (as someone discards his previous view when he accepts a new scientific or political theory), he would tend to forget how he had thought in the past and be unable to decode his early memories. If, on the other hand, his present view of reality had evolved from his early view, through the gradual integration of adult concepts, he would still be able to understand his earlier way of thinking or—more likely—would have converted his earlier memories to his new way of thinking as his mind evolved.

My guess is that the shift from a continually evolving, integrative mind to a "pattern-accepting" mind occurs as a result of our type of education, in which learning is divorced from direct observation. The individual variation would, logically, be accounted for by differences in age and intelligence at the time children start to assimilate large amounts of information in school.

This hypothesis conforms with the observed fact that early memories can be revived through hypnotic age regression, which returns an individual to the general understanding of reality which he had at an earlier age. Also, Buddhism asserts that people cannot remember their childhood, or their previous lives, because of their *attachment*.

I would be interested to hear if this hypothesis is in conformity with your holographic theory. Possibly, some people retain a single system of encoding memories while,

in others, the encoding system is broken at a particular age.

Thank you.

Truly yours,
George Beiler

851 California St. #22C
San Francisco, CA

Dear Mr. Beiler,

I'm not entirely sure the holographic theory is "mine", in the sense that I agree with it. It's certainly not mine in the sense of originating it.

I don't see any obvious conflict between the holographic brain model and your own view. I suspect your theory would make a good Ph.D. dissertation for some psychology student, and might result in a pretty good book as well. I've seen worse books published about sillier ideas.

Whether or not we accept the holographic brain model, the evidence for dynamic as opposed to fixed memory storage gets stronger every day. Just last week I heard that at least part of the evidence for chemical memory—namely the experiment in which flatworms were fed to others, and the new ones seemed to get some of the previous worms's memories—had collapsed. Like polywater, at least some of the results were due to dirty laboratory glassware.

Best,
Jerry Pournelle

Dear Mr. Baen,

I agree with Alter (*Alien Viewpoint—December IF*). The so-called intellectual SF is a rip-off and a bore. Reading a disconnected backwards nightmare of a novel is not my idea of good SF or good anything. Instead let's see more authors using science in fiction and writing so we can all understand their point of view.

I enjoy both *Galaxy* and *If*—hope the new combined magazine will be as good.

Peace,
Christie Cecil

1175 Ellis (Apt. C-201)
San Francisco, CA

No argument.

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